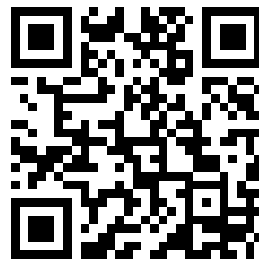


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***Railroad Gazette**

14 Nov 03

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...1882...

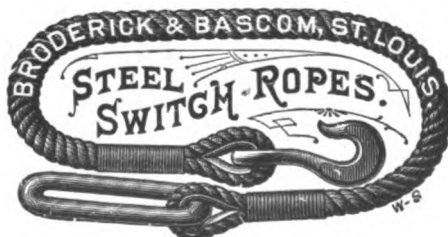


Broderick & Bascom Rope Co.

SOLE MANUFACTURERS OF



Ballast Unloaders, Steel Switch Ropes,
Hoisting Ropes,
Semaphore Rope and Strand.



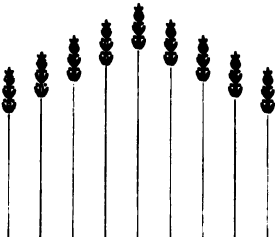
See List Prices, pages 70 to 77, inc.,
this book.

ST. LOUIS, U. S. A.

Catalogue
...OF...
Standard List-Prices
...OF...
Material Used by Railroads.
.....1900.....

Printed and Bound by
I. N. JONES & SON, Richmond, Va.
1900.

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TILDEN FOUNDATIONS.
1904



IN PUBLISHING THIS LITTLE CATALOGUE, IT
HAS BEEN OUR IDEA TO GET TOGETHER UNDER
ONE HEADING, AND IN CONVENIENT SHAPE, AS
NEAR AS POSSIBLE, ALL MATERIAL HAVING A
REGULAR STANDARD LIST USED BY RAILROADS.
WE ARE MAILING THIS CATALOGUE TO YOU WITH
OUR COMPLIMENTS, AND TRUST THAT YOU MAY
FIND SAME USEFUL IN YOUR OFFICE. WE ALSO
TRUST THAT IT WILL BE OF SOME BENEFIT TO
OUR ADVERTISERS, WHO KINDLY HELPED US IN
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Angle Bars—The Tredegar Co.
Axles—May & Spalding.

B

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Brake Rod Jaws & Pins—Jas. H. Baker M'fg. Co.
Bronze Powders & Liquids—Gerstendorfer Bros.
Brushes—Wolfe, Walker & Co.

C

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Carbon Paper—J. S. McDonald & Co.
Castings, Steel—The Sargent Co.
Chamois—The Stein Voegler Drug Co.
Coke—C. R. Baird & Co.
Copying Paper and Books—Wm. Mann Co.
Compressors—The Norwalk Iron Works Co.
Couplers—The McConway & Torley Co.

D

Draughtsman's Supplies—F. Weber & Co.
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Dry Goods, Notions—Drewry-Hughes Co.
Duck—Mt. Vernon Woodberry Cotton Duck Co.
Dyes—The French Renovating Process Co.
Dyes—Chas. H. Fitch.

E

Electric Supplies—H. C. Roberts Elec. Supply Co.
Engravers—Lohmann Lithographing Co.
Engravers—I. N. Jones & Son.
Engineers' Supplies—F. Weber & Co.
Engineers—Bobt. Poole & Sons.

F

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Flags—R. J. Patton & Co.
Founders—Robt. Poole & Sons.
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Fusees—The Western Railway Signal Co.

G

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Hardware—W. S. Donnan & Co.
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I

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Inspection of Material—Pittsburgh Testing Lab.
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Iron—Dallett & Co.
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Iron, Bar—C. R. Baird & Co.
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Iron, Stay Bolt—B. M. Jones & Co.

J

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Jacks—The Chapman Jack Co.

K

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Lubricators—The Michigan Lubricator Co.

M

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Machinery—The E. A. Kinsey Co.
Machinery—Carse Bros. Co.
Machinery—T. N. Motley Co.
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Nuts—Port Chester Bolt and Nut Co.

O

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Oils—Harwood Bros.

P

Packing—The Stein-Voegler Drug Co.
Pipe, Gas and Water—The Glamorgan Pipe and Foundry Co.
Pork Packers—W. S. Forbes & Co.
Printing—I. N. Jones & Son.
Printing—Hart & Cohen.
Printing—Allen, Lane & Scott.
Printers, Publishers—The Bell Book and Stationery Co.
Punches, Conductors'—Allen, Lane & Scott.

R

Railroad Equipment—T. N. Motley Co.
Railroad Supplies—L. J. Buckley & Co.
Railroad Supplies—E. A. Kinsey & Co.
Railroad Supplies—Cuyler & Mohler.
Railroad Supplies—Southern Railway Supply Co.
Railroad Supplies—Smith-Courtney Co.
Railroad Supplies—The Chas. A. Strelinger Co.
Reamers, etc.—Pratt & Whitney Co.
Relaying Rails—May & Spalding.
Rubber Goods—United & Globe Rubber Manufacturing Co.
Rubber Goods—B. F. Goodrich Rubber Co.

S

Scrap—Dallett & Co.
Scrap Material—May & Spalding.
Slate—J. R. Williams & Co.

Sponges—The Stein-Voegler Drug Co.
Springs—The Chas. Scott Spring Co.
Spikes—The Tredegar Co.
Switches and Switch Stands—Weir Frog Co.
Steel—L. J. Buckley & Co.
Steel—B. M. Jones & Co.
Steel—Carbon Steel Co.
Steel Tubing—Shelby Steel Tube Co.
Stationers—J. S. McDonald & Co.
Stationers—The Bell Book and Stationery Co.

T

Tacks—The Anchor Nail and Tack Works.
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Telegraph Supplies—H. C. Roberts Electric Supply Co.
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Tools—The Chas. A. Strelinger Co.
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Torpedoes—The Western Railway Signal Co.
Tubing—Shelby Steel Tube Co.
Turnbuckles—Cleveland City Forge and Iron Co.
Typewriters—Wyckoff, Seamans & Benedict.

V

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Valves—The Fairbanks Co.

W

Water Columns—Jno. N. Poage.
Wheels, Car—May & Spalding.
Wire and Wire Rope—Jno. A. Roeblings Sons Co.
Wire Cloth—The New Jersey Wire Cloth Co.
Wire Rope and Wire—Broderick & Bascom R. Co.
Wood-Working Machinery—Carse Bros. Co.

ESTABLISHED 1825.

U. S. IRON.

BROWN & CO., INCORPORATED,

PITTSBURGH, PA.

For Staybolts, Piston Rods, Driving Axles and Other Special Purposes.

FISHERIES: Key West, Cuba, Mexico.

The Stein-Vogeler Drug Co.

IMPORTERS AND EXPORTERS OF

SPONGES AND CHAMOIS.

**217-219-221 EAST SIXTH STREET,
CINCINNATI.**

Special Packing for Railroads.

MAX FUCHS, Manager.

WROUGHT IRON PIPE.

Nominal Inside Diameter, Inches.	Price per Foot, Black.	Price per Foot, Galvanized.	Price per Foot, Ex. Strong.	Price per Foot, Double Ex. Strong.
$\frac{1}{8}$	\$0.08 $\frac{1}{2}$	\$0.18	\$0.22	
$\frac{1}{4}$	.08 $\frac{1}{2}$	.16	.17	
$\frac{3}{8}$	.08 $\frac{1}{2}$	.16	.17	
$\frac{1}{2}$	.10 $\frac{1}{2}$	.17	.19	\$0.50
$\frac{3}{4}$	.11 $\frac{1}{2}$	.19	.20	.60
1	.16 $\frac{1}{2}$	.26	.29	.75
1 $\frac{1}{4}$	.22	.36	.39	.85
1 $\frac{1}{2}$	.27	.44	.48	1.10
2	.36	.59	.63	1.60
2 $\frac{1}{2}$	.57	.91	1.15	2.30
3	.75	1.20	1.50	3.25
3 $\frac{1}{2}$	.93	1.60	1.90	4.20
4	1.07	1.75	2.15	4.85
4 $\frac{1}{2}$	1.40	2.30	2.80	6.45
5	1.55	2.55	3.10	7.35
6	1.95	3.20	3.90	9.45
7	2.53	4.30	5.25	11.85
8	2.95	5.20	6.00	13.75
9	3.80			
10	4.50			
11	5.30			
12	5.75			

LAP-WELDED BOILER TUBES.

Outside Diameter, Inches.	Price per Foot.	Thickness nearest Bgm. W. G.
1	\$0.37	13
1 $\frac{1}{4}$	.35	13
1 $\frac{1}{2}$	.32	13
1 $\frac{3}{4}$	.32	13
2	.30	13
2 $\frac{1}{4}$	.36	18
2 $\frac{1}{2}$	.36	12
2 $\frac{3}{4}$	.39	12
3	.39	12
3 $\frac{1}{4}$	.45	11
3 $\frac{1}{2}$	.48	11
3 $\frac{3}{4}$	.55	11
4	.60	10
4 $\frac{1}{2}$	.69	10
5	.82	9
6	1.08	8
7	1.33	8
8	1.70	8
9	2.25	7
10	2.76	6
11	3.30	5
12	3.77	4 $\frac{1}{2}$

LAP-WELDED CASING.

Nominal Inside Diam. Inches.	Price per Foot.
2	\$0.28
2 $\frac{1}{4}$	.30
2 $\frac{1}{2}$	.32
2 $\frac{3}{4}$	.34
3	.37
3 $\frac{1}{4}$	.40
3 $\frac{1}{2}$	.43
3 $\frac{3}{4}$	.49
4	.54
4 $\frac{1}{4}$	.56
4 $\frac{1}{2}$	.58
4 $\frac{3}{4}$	.63
5	.65
5 $\frac{1}{8}$	.67
5 $\frac{3}{8}$	.76
6 $\frac{1}{4}$	.91
6 $\frac{3}{8}$	1.00
7 $\frac{1}{4}$	1.07
7 $\frac{3}{8}$	1.30
8 $\frac{1}{4}$	1.43
8 $\frac{3}{8}$	1.60
9 $\frac{1}{8}$	1.80
10 $\frac{5}{8}$	2.30
11 $\frac{3}{8}$	2.55

These prices are for Tubes up to 20 feet long. For Tubes in excess of that length, 10 per cent. will be added to net of invoice. Extra thickness of Tubes will be charged as per list of Extra Gauges.

EXTRA WIRE GAUGE, AWAY FROM STANDARD.

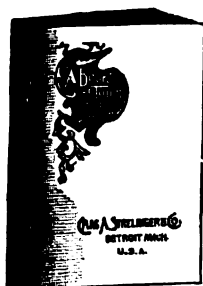
For 1 Number.	For 2 Numbers.	For 3 Numbers.	For 4 Numbers.
2 inch, 2 cents.	2 inch, 4 cents.	2 inch, 6 cents.	2 inch, 8 cents.
2 $\frac{1}{4}$ inch, 2 $\frac{1}{4}$ cents.	2 $\frac{1}{4}$ inch, 4 $\frac{1}{2}$ cents.	2 $\frac{1}{4}$ inch, 6 $\frac{3}{4}$ cents.	2 $\frac{1}{4}$ inch, 9 cents.
2 $\frac{1}{2}$ inch, 2 $\frac{1}{2}$ cents.	2 $\frac{1}{2}$ inch, 5 cents.	2 $\frac{1}{2}$ inch, 7 $\frac{1}{2}$ cents.	2 $\frac{1}{2}$ inch, 10 cents.

Beyond four numbers price is per lb. Swaging or swelling 2 inch or 2 $\frac{1}{4}$ inch Tubes, 5 cents per end extra.

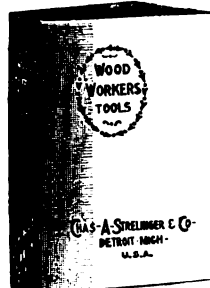
WROUGHT IRON PIPE—Revised List.

Nominal Inside Diameter, Inches.	Price per Foot, Black and Galvanized.	Price per Foot, Extra Strong.	Price per Foot, Double Extra Strong.
$\frac{1}{8}$	\$0.05 $\frac{1}{2}$	\$0.11	
$\frac{1}{4}$	.05 $\frac{1}{2}$	.11	
$\frac{3}{8}$	.05 $\frac{1}{2}$	.11	
$\frac{1}{2}$	.08 $\frac{1}{2}$	.12	\$0.25
$\frac{3}{4}$	.11 $\frac{1}{2}$	.15	.30
1	.16 $\frac{1}{2}$	.22	.37
1 $\frac{1}{4}$	.22 $\frac{1}{2}$	.30	.52
1 $\frac{1}{2}$	.27	.36	.65
2	.36	.50	.95
2 $\frac{1}{2}$	.57 $\frac{1}{2}$	.81	1.37
3	.75 $\frac{1}{2}$	1.05	1.92
3 $\frac{1}{2}$	.95	1.33	2.45
4	1.08	1.50	2.85
4 $\frac{1}{2}$	1.30	1.95	3.30
5	1.45	2.16	3.80
6	1.88	2.90	5.30
7	2.35	3.80	6.25
8	2.82	4.30	7.20
9	3.40		
10	4.25		
11	4.75		
12	5.20		

STANDARD LAP-WELDED BOILER TUBES.			LAP-WELDED CASING.			
Outside Diameter, Inches.	Price per Foot.	Thickness Nearest B. W. G.	Nominal Inside Diameter, Inches.	Price per Foot.	Nominal Inside Diameter, Inches.	Price per Foot.
1	\$0.30	13	2	\$0.23	5 $\frac{5}{8}$	\$1.20
1 $\frac{1}{4}$	.28	13	2 $\frac{1}{4}$	.29	5 $\frac{5}{8}$	1.40
1 $\frac{1}{2}$	.27	13	2 $\frac{1}{2}$	.32	5 $\frac{5}{8}$	1.60
1 $\frac{3}{4}$	.22	13	2 $\frac{3}{4}$	.35	6 $\frac{1}{4}$	1.16
2	.20	13	3	.41	6 $\frac{1}{4}$	1.35
2 $\frac{1}{4}$	.24	13	3 $\frac{1}{4}$	.45	6 $\frac{1}{4}$	1.70
2 $\frac{1}{2}$	.28	12	3 $\frac{1}{2}$	.48	6 $\frac{5}{8}$	1.24
2 $\frac{3}{4}$	.34	12	3 $\frac{3}{4}$	.56	6 $\frac{5}{8}$	1.75
3	.35	12	4	.60	7 $\frac{1}{4}$	1.38
3 $\frac{1}{4}$	.40	11	4 $\frac{1}{4}$	.64	7 $\frac{5}{8}$	1.55
3 $\frac{1}{2}$	.44	11	4 $\frac{1}{2}$	.68	7 $\frac{5}{8}$	2.10
3 $\frac{3}{4}$	.50	11	4 $\frac{3}{4}$	1.00	8 $\frac{1}{4}$	1.61
4	.55	10	4 $\frac{3}{4}$	.78	8 $\frac{1}{4}$	2.00
4 $\frac{1}{2}$	.62	10	5	.82	8 $\frac{1}{4}$	2.40
5	.75	9	5	1.00	8 $\frac{5}{8}$	1.76
6	1.00	8	5	1.30	9 $\frac{5}{8}$	2.20
7	1.20	8	5	1.50	10 $\frac{5}{8}$	2.68
8	1.50	8	5 $\frac{1}{4}$	.87	11 $\frac{5}{8}$	3.05
9	1.70	7	5 $\frac{1}{4}$	1.30	12 $\frac{1}{2}$	3.38
10	2.10	6	5 $\frac{5}{8}$	1.05		
11	2.50	5				
12	2.90	4 $\frac{1}{2}$				
13	3.20	4				
14	3.65	3 $\frac{1}{2}$				
15	4.10	3				
16	4.60	2 $\frac{1}{2}$				



OUR TWINS.



The Chas. A. Strelinger Co.

...MACHINERY...

Tools and Supplies, Engines, Boilers and
Power Transmission.

Nos. 96 to 110 Bates St. (Cor. Congress).

Detroit, Mich. Jan. 25, 1900.

Mr. W. W. HUNTLEY,
Richmond, Va.

DEAR SIR:—You ask us take an ‘ad.’ in your Catalogue of Price Lists, and we have been studying on a reason why we should. After much study we have come to the conclusion to try it a whack anyhow—reason or no reason. You see, we are not headquarters for anything. We don’t belong to any trust nor to anybody else. We are not dead stuck on hustling for business without having a few ‘plunks’ left for ourselves after the transaction is concluded, so we have the reputation of being a high-priced house.

Now WHY, friend Huntley, have we managed to keep the wolf from the door, to clothe ourselves in purple and fine linen, and to occupy elegant residences on the avenues of this city? WHY?

First, just because we have a line of Metal and Wood-Working Tools, Machinery and Supplies not to be found in any other house in this country. Second, we go our whole length—and we’re very tall—on quality. Third, whatever we agree to do WE DO, and this holds just as good on small as on large transactions.

Your metal-working reader wants—and must have—our ‘Book of Tools,’ 540 pages, 2,000 illustrations. Your wood-working reader has got to have our ‘Wood-Workers’ Tools,’ 400 pages, 1,800 illustrations. Both complete, full of information, handy size, prices approximately net. We send either at 25 cents, and, if not satisfactory, will return the money and he may keep the book.

Wishing you good luck and lots of publicity with your book, we are

Very respectfully,

THE CHAS. A. STRELINGER CO.

Box H. Detroit, Mich.

REVISED CLASSIFICATION AND PRICE LIST

OF

Malleable Iron, Gas, Water and Steam Fittings

ADOPTED BY MANUFACTURERS JUNE 19, 1895.

	CLASS A. Black, per lb. 30c Galv., per lb. 40c	CLASS B. Black, per lb. 20c Galv., per lb. 27c	CLASS C. Black, per lb. 16c Galv., per lb. 23c	CLASS D. Black, per lb. 13c Galv., per lb. 20c	CLASS E. Black, per lb. 11c Galv., per lb. 18c
Elbows	$\frac{1}{8} \times \frac{1}{8}$ $\frac{1}{4} \times \frac{1}{8}$ $\frac{3}{8} \times \frac{1}{8}$	$\left\{ \begin{array}{l} \frac{1}{4} \times \frac{1}{4} \quad \frac{3}{8} \times \frac{1}{4} \\ \frac{3}{8} \times \frac{3}{8} \quad \frac{1}{2} \times \frac{1}{4} \end{array} \right.$	$\frac{1}{2} \times \frac{1}{2}$ $\frac{1}{2} \times \frac{3}{8}$	$\frac{3}{4}$ and 1	$\frac{1}{2}$ & Larger.
Right and Left,	$\frac{1}{4}$ and $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$ and 1	$\frac{3}{4}$ and Larger.	
45°		$\frac{1}{2}$ and Smaller.	$\frac{3}{4}$ to 2	$\frac{1}{2}$ and Larger.	
Street		$\frac{1}{4}$ and $\frac{3}{8}$	$\frac{1}{2}$ $\frac{3}{4}$ $\frac{3}{4} \times \frac{1}{2}$ $1 \times \frac{3}{4}$	1 and Larger.	
Side Outlet		$\frac{1}{2}$ and Smaller.	$\frac{3}{4}$ and Larger.		
Drop		$\frac{1}{2}$ and Smaller.	$\frac{3}{4}$ and Larger.		
Tees	$\left\{ \begin{array}{l} \frac{1}{8} \times \frac{1}{8} \quad \frac{1}{8} \times \frac{1}{4} \\ \frac{1}{4} \times \frac{1}{8} \quad \frac{3}{8} \times \frac{1}{8} \end{array} \right.$	$\left\{ \begin{array}{l} \frac{1}{4} \times \frac{1}{4} \quad \frac{3}{8} \times \frac{3}{8} \\ \frac{1}{4} \times \frac{3}{8} \quad \frac{3}{8} \times \frac{1}{4} \times \frac{1}{4} \\ \frac{3}{8} \times \frac{1}{4} \quad \frac{3}{8} \times \frac{1}{4} \times \frac{3}{8} \end{array} \right.$	$\frac{1}{2}$ and $\frac{1}{2}$ Red'c'g.	$\frac{3}{4}$ and 1	$\frac{1}{2}$ & Larger.
Four Way		$\frac{1}{2}$ and Smaller.	$\frac{3}{4}$ and Larger.		
Drop		$\frac{1}{2}$ and Smaller.	$\frac{3}{4}$ and Larger.		
Crosses—					
Straight		$\frac{1}{4}$ $\frac{3}{8}$ $\frac{1}{2}$	$\frac{3}{4}$ and 1	$1\frac{1}{4}$ and Larger.	
Reducing		1 and Smaller.		$\frac{1}{2}$ and Larger.	
“Y” Bends		$\frac{1}{2}$ and $\frac{3}{4}$	1 and Larger.		
Return Bends		$\frac{3}{8}$ and $\frac{1}{2}$	$\frac{3}{4}$ and 1	$1\frac{1}{4}$ and Larger.	
Return Bends—					
R. & L.	$\frac{3}{8}$ and $\frac{1}{2}$	$\frac{3}{4}$ and 1	$1\frac{1}{4}$ and Larger.		
Couplings—R. H.	$\frac{1}{8}$	$\frac{1}{4}$ and $\frac{3}{8}$	$\frac{1}{2}$ and $\frac{3}{4}$	1 and $1\frac{1}{4}$	$1\frac{1}{2}$ and 2
Right and Left,	$\frac{1}{8}$	$\frac{1}{4}$ and $\frac{3}{8}$	$\frac{1}{2}$ and $\frac{3}{4}$	1 and Larger.	
Reducing	$\frac{1}{4} \times \frac{1}{8}$ $\frac{3}{8} \times \frac{1}{8}$	$\frac{3}{8} \times \frac{1}{4}$ to $\frac{3}{4} \times \frac{3}{8}$	$\frac{3}{4} \times \frac{1}{2}$ to $1 \times \frac{3}{4}$	$\frac{1}{2}$ and Larger.	
Caps		$\frac{1}{4}$ and $\frac{3}{8}$	$\frac{1}{2}$ to 1	$1\frac{1}{4}$ and Larger.	
Lock Nuts		$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{3}{4}$ to $1\frac{1}{4}$	$1\frac{1}{2}$ and Larger.	
Ext. Pieces.		$\frac{3}{8}$ and $\frac{1}{2}$	$\frac{3}{4}$ and Larger.		
Waste Nuts.		$\frac{3}{4}$ and Smaller.	1 and Larger.		
Rod Couplings.	All Sizes.				
Chandi'r Hooks,		All Sizes.			
Wall Plates.		All Sizes.			

*Fittings in Class D having one or more Outlets smaller than $\frac{3}{4}$ inch will be charged as Class C.

*Fittings in Class E having one or more Outlets smaller than 1 inch will be charged as Class D.

Orders for Malleable Fittings aggregating not more than 25 lbs., assorted in Classes B, C, D and E, will be charged as Class B. The diameter of the run of Bullhead Tees is the basis for classification, and the outlet being larger does not change the Class.

Return Bends reduced, Return Bends tapped on spread, Elbows tapped on pitch, 15% added.

Right and Left Fittings, not classified above, 15% added.



Agents for the Hartley & Teeter Railway Cycle.

THORNTON N. MOTLEY COMPANY

INCORPORATED

Railroad Equipment.

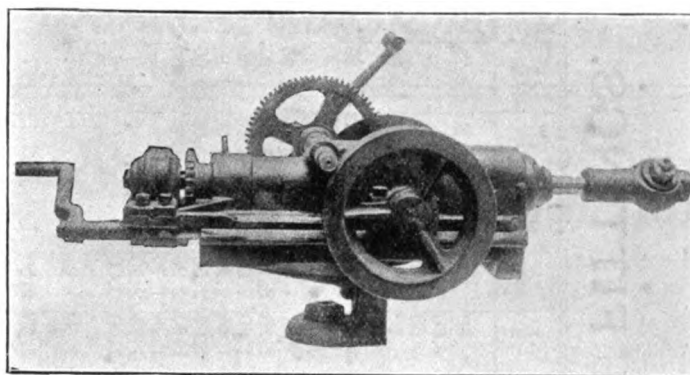
MACHINERY AND HARDWARE FOR EXPORT.

Railway, Steamship,
Mining and Contractors'
Supplies.

No. 43 JOHN STREET,
NEW YORK.

Near Nassau Street.

Belting.
Bolts, Nuts and Washers.
Boilers, all kinds.
Brake Shoe—Corning.
Brass and Copper.
Blocks, all kinds.
Brick—Vitrified.
Cars—Box and Flat.
Cars—Push, Hand and Dump.
Cars—Velocipede and Cycle.
Car Replacers.
Castings—Railroad. Carts, Dump.
Chains and Cables.
Drill—Jackson Hand-Power.
Engines—Stationary and Hoisting.
Forges.
Frogs, Switches and Switch Stands.
Gauge Glasses.
Gates—Railway.
Handles.
Headlights, Lamps, Lanterns, Etc.
Hoists and Derricks.
Hose, all kinds.
Ice Machines.
Locomotives, any gauge.
Machinery—Wood-Working and Iron.
Nut Locks.



Sole Licensees and Manufacturers of the JACKSON HAND-POWER DRILL
for Eastern U. S. and Foreign Countries.

Packing, all kinds.
Picks.
Pipe—Cast Iron, Wrot., Vitrified, Etc.
Pipe Fittings.
Press—Railroad Joint.
Portable Houses.
Pumps.
Rope—Manilla, Wire.
Roofing—Asphalt.
Rail.
Rail Braces and Tie Plates.
Road Machines and Plows.
Saw Mills.
Scrapers—Wheel and Drag.
Shovels, Scoops, and Spades.
Shafting and Pulleys.
Spikes.
Tanks, all kinds.
Tongs, all kinds.
Track Tools, all kinds.
Trucks, Etc.
Track—Portable.
Torchlights—Portable.
Valves, all kinds.
Waste.
Wheelbarrows—Wood and Iron.
Wrenches, all kinds.

SIZE.	Inches.	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	9	10	12
Elbows, R. H.	Each	.05	.06	.08	.10	.12	.16	.20	.28	.50	.75	1.05	1.20	1.75	2.00	2.75	4.70	6.75	9.00	13.50	20.00
Elbows, R. & L.	Each	.06	.07	.09	.12	.18	.23	.32	.32	.60	.85	.85									
Elbows, L. H.	Each	.06	.07	.09	.12	.18	.23	.32	.32	.60	.85	.85									
Elbows, Reducing	Each	.06	.07	.09	.12	.18	.23	.32	.32	.60	.85	.85									
Elbows, Pitched	Each	.06	.07	.09	.12	.18	.23	.32	.32	.60	.85	.85									
Elbows, with Side Outlet	Each	.18	.24	.30	.36	.48	.60	.84	.84	1.50	2.25	3.15	3.60	5.25	6.00	8.25	5.90	8.50	11.25	17.00	25.00
45° Elbows.	Each	.06	.07	.09	.12	.18	.24	.34	.34	.60	.90	1.25	1.45	2.20	2.50	3.45	6.80	9.75	13.00	19.50	28.00
Tees.	Each	.08	.09	.12	.15	.23	.29	.41	.73	.83	1.10	1.50	1.75	2.55	3.00	4.00	7.80	11.25	15.00	22.50	33.50
Tees, Reducing.	Each	.09	.10	.14	.17	.27	.33	.47	.83	1.25	1.75	2.25	2.65	3.50	4.00	5.00	9.20	13.50	19.25	28.00	40.00
Tees, with Side Outlet	Each	.27	.36	.45	.70	.90	1.25	1.25	2.25	3.25	4.50	5.25	7.65	9.00	12.00						
Crosses.	Each	.15	.16	.22	.27	.42	.53	.75	1.30	2.00	2.00	2.70	3.15	4.60	5.50	7.25	12.25	17.50	23.50	35.00	52.50
Crosses, Reducing	Each	.18	.25	.30	.46	.60	.83	1.45	2.20	3.00	3.50	4.00	5.90	7.00	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Y Bends.	Each	.20	.28	.34	.54	.66	.94	1.66	2.50	3.50	4.00	4.00	6.80	8.00	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Y Bends, Reducing.	Each	.23	.33	.40	.62	.76	1.08	1.90	2.90	4.00	4.00	4.00	6.80	8.00	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Return Bends, Close	Each	.18	.20	.22	.28	.40	.55	.80	1.35	2.20	3.00	3.50	4.00	6.80	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Return Bends, Open	Each	.26	.30	.40	.55	.80	1.35	2.20	3.00	3.50	4.00	4.00	6.80	8.00	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Return Bends, Back Outlet.	Each	.38	.42	.60	.80	1.15	2.00	3.00	4.00	6.00	8.00	10.00	12.00	16.00	20.00	24.00	32.00	40.00	50.00	60.00	77.00
Return Bends, Close, R. and L.	Each	.21	.23	.26	.33	.46	.66	1.40	1.95	2.50	3.00	3.50	4.00	6.80	8.00	10.60	18.00	25.00	35.00	50.00	77.00
Return Bends, Open, R. and L.	Each	.30	.35	.46	.64	.92	1.55	2.50	3.50	5.00	6.00	7.00	8.00	12.00	16.00	20.00	28.00	35.00	45.00	55.00	77.00
Return Bends, Close Pitched, R. H.	Each	.26	.33	.46	.64	.92	1.55	2.50	3.50	5.00	6.00	7.00	8.00	12.00	16.00	20.00	28.00	35.00	45.00	55.00	77.00
Return Bends, Close Pitched, R. and L. or L. H.	Each	.26	.33	.46	.64	.92	1.55	2.50	3.50	5.00	6.00	7.00	8.00	12.00	16.00	20.00	28.00	35.00	45.00	55.00	77.00
Caps, Cast Iron																					

THE TREDEGAR CO.

Spikes, Fishplates, Axles, Bar Iron, Angle Bars

CASTINGS, CAR WHEELS,
HORSESHOES, FREIGHT CARS.

Tredegar Iron Works, Richmond, Va.

Wolfe, Walker & Co.

LIMITED,
PITTSBURGH, PA.

.....THE ONLY MANUFACTURERS OF.....

 **BRUSHES** 

SPECIALLY DESIGNED FOR THE RAILROAD TRADE.

BEWARE OF IMITATIONS.

Represented by W. B. WOLFE and H. BRADLEY PRUDEN.

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MACHINERY AND SUPPLIES

... FOR ...

RAILWAYS, MACHINISTS, MILLS, MINES, CONTRACTORS, Etc.

331 AND 333 WEST FOURTH STREET,
CINCINNATI, O.

Threaded Right Hand.

WROUGHT-IRON NIPPLES.

Adopted Oct. 7, 1899.

LENGTH IN INCHES.						SIZES.	PRICES.		PRICES OF EXTRA LONG NIPPLES.											
Close.	Short.	Long.					Close or Short	Long.	Lengths in Inches.											
									4	5	6	7	8	9	10	11	12			
$\frac{3}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{8}$	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19		
$\frac{7}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{4}$	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19		
1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{3}{8}$	.04	.06	.07	.08	.10	.12	.14	.15	.17	.18	.19		
$1\frac{1}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{2}$	.05	.07	.08	.10	.12	.14	.16	.18	.20	.22	.23		
$1\frac{3}{8}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$\frac{3}{4}$	.06	.09	.....	.11	.13	.17	.18	.20	.22	.24	.26
$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	1	.08	.13	.....	.15	.18	.23	.25	.28	.31	.34	.36	
$1\frac{5}{8}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{4}$	.11	.17	.....	.20	.24	.29	.33	.36	.40	.44	.47
$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{2}$	.13	.20	.....	.25	.29	.36	.40	.45	.50	.54	.59
2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	2	.18	.27	.....	.32	.38	.50	.54	.59	.65	.72	.77	
$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$2\frac{1}{2}$	.39	.59	.....	.....	.68	.90	.97	1.06	1.17	1.26	1.35
$2\frac{3}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	3	.48	.72	.....	.....	.85	1.08	1.20	1.33	1.45	1.58	1.70
$2\frac{3}{4}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$3\frac{1}{2}$	.75	1.05	.....	.....	.....	1.30	1.45	1.60	1.75	1.90	2.05
3	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	4	.85	1.20	.....	.....	.....	1.52	1.69	1.87	2.05	2.22	2.40
3	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$4\frac{1}{2}$	1.25	1.70	.....	.....	.....	2.25	2.50	2.75	2.95	3.17	3.40
$3\frac{1}{2}$	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	5	1.55	2.45	.....	.....	.....	2.68	2.83	3.10	3.35	3.60	3.85
$3\frac{1}{2}$	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	6	1.85	2.90	.....	.....	.....	3.05	3.35	3.70	4.00	4.30	4.65
4	5	6	.....	.....	.....	7	3.20	3.60	.....	.....	.....	4.05	4.45	4.90	5.30	5.75	6.15
4	5	6	.....	.....	.....	8	3.55	4.05	.....	.....	.....	4.55	5.05	5.50	6.00	6.50	7.00
5	6	8	.....	.....	.....	9	5.25	6.50	.....	.....	.....	.....	.....	7.10	7.75	8.40	9.00
5	6	8	.....	.....	.....	10	6.75	8.25	.....	.....	.....	.....	.....	8.90	9.70	10.40	11.15
5	6	8	.....	.....	.....	12	8.00	10.00	.....	.....	.....	.....	.....	10.80	11.75	12.70	13.65

Threaded Right and Left.

PRICES OF EXTRA LONG R. AND L. NIPPLES.

$\frac{3}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{8}$	.05	.08	.09	.11	.13	.16	.18	.20	.23	.25	.27			
$\frac{7}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{4}$	.05	.08	.09	.11	.13	.16	.18	.20	.23	.25	.27			
1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{3}{8}$	.05	.08	.09	.11	.13	.16	.18	.20	.23	.25	.27			
$1\frac{1}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{2}$	.07	.10	.11	.13	.16	.18	.21	.24	.27	.29	.31			
$1\frac{3}{8}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$\frac{3}{4}$	.08	.12	.....	.15	.17	.23	.25	.27	.29	.32	.35			
$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	1	.11	.18	.....	.20	.24	.31	.33	.37	.41	.45	.48			
$1\frac{5}{8}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{4}$	.15	.23	.....	.27	.32	.39	.45	.50	.55	.60	.65			
$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{2}$	.18	.27	.....	.34	.39	.48	.52	.60	.67	.72	.80			
2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	2	.24	.36	.....	.43	.51	.67	.72	.80	.87	.96	1.03			
$2\frac{1}{8}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$2\frac{1}{2}$	.52	.79	.....	.....	.91	1.20	1.30	1.40	1.55	1.68	1.80			
$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	3	.65	.96	.....	.....	1.13	1.44	1.60	1.77	1.93	2.10	2.27			
$2\frac{3}{4}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$3\frac{1}{2}$	1.00	1.40	.....	.....	.....	1.75	1.95	2.15	2.35	2.55	2.75			
3	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	4	1.15	1.60	.....	.....	.....	2.00	2.25	2.50	2.75	3.00	3.25			

Add 60 per cent. to above prices for Galvanized Nipples, Threaded Right and Left.

GALVANIZED NIPPLES.

Threaded Right Hand.

PRICES OF EXTRA LONG GALVANIZED NIPPLES.

$\frac{3}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{8}$	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34			
$\frac{7}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{4}$	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34			
1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{3}{8}$	.06	.11	.12	.15	.17	.21	.24	.26	.29	.31	.34			
$1\frac{1}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	$\frac{1}{2}$	.06	.11	.13	.16	.18	.23	.26	.28	.31	.33	.36			
$1\frac{3}{8}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$\frac{3}{4}$	.08	.14	.....	.18	.21	.26	.29	.32	.35	.38	.41			
$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	1	.11	.19	.....	.24	.28	.34	.38	.42	.47	.51	.55			
$1\frac{5}{8}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{4}$	.17	.29	.....	.32	.38	.45	.51	.57	.63	.69	.75			
$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	$1\frac{1}{2}$	.21	.35	.....	.39	.46	.55	.63	.70	.77	.84	.91			
2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	2	.27	.47	.....	.52	.61	.74	.83	.93	1.03	1.13	1.23			
$2\frac{1}{8}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$2\frac{1}{2}$	.56	.86	.....	.....	1.00	1.26	1.41	1.56	1.71	1.86	2.01			
$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	3	.70	1.10	.....	.....	1.30	1.60	1.80	2.00	2.20	2.40	2.60			
$2\frac{3}{4}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$3\frac{1}{2}$	1.20	1.70	.....	.....	.....	2.10	2.35	2.60	2.85	3.15	3.40			
3	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	4	1.35	1.87	.....	.....	.....	2.30	2.60	2.90	3.20	3.50	3.80			
3	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$4\frac{1}{2}$	1.85	2.60	.....	.....	.....	3.30	3.65	4.05	4.45	4.85	5.25			
$3\frac{1}{2}$	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	5	2.30	3.15	.....	.....	.....	3.75	4.20	4.60	5.00	5.40	5.85			
$3\frac{1}{2}$	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	6	2.80	4.25	.....	.....	.....	4.50	5.00	5.55	6.05	6.60	7.15			
4	5	6	.....	.....	.....	7	4.25	4.95	.....	.....	.....	5.65	6.35	7.05	7.75	8.45	9.20			
4	5	6	.....	.....	.....	8	5.00	5.80	.....	.....	.....	6.65	7.50	8.35	9.25	10.10	10.95			

BRASS EXPANSION JOINTS.

Size	Inches,	$\frac{1}{4}$	$\frac{1}{2}$	1	$1\frac{1}{2}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	8
Brass Expansion Joints, Screwed, Eastern Traverse.....	Each	3.80	4.00	4.90	6.80	7.40	9.10	.....	.....
Brass Expansion Joints, Screwed, Western Traverse.....	Each	1.50	2.20	2.75	4.00	5.00	8.00	17.50	24.00

IRON BODY EXPANSION JOINTS.

Size	Inches,	2	$2\frac{1}{2}$	3	$3\frac{1}{4}$	4	5	6	7	8	9	10	12
Iron Body Expansion Joints, Screwed.....	Each	7.00	8.00	10.00	14.00	18.00	38.00	45.00	70.00	100.00	110.00	160.00	225.00
Iron Body Expansion Joints, Flanged.....	Each	15.00	16.00	18.50	25.00	30.00	48.00	55.00	80.00	110.00	120.00	175.00	250.00
TRAVERSE	Inches,	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	3	$3\frac{1}{4}$	4	5	6	7	7	7	8

IRON BODY EXPANSION JOINTS.

6-INCH TRAVERSE.

Size	Inches,	2	$2\frac{1}{2}$	3	$3\frac{1}{4}$	4	$4\frac{1}{4}$	5	6
Iron Body Expansion Joints, Screwed.....	Each	11.00	13.00	17.50	25.00	30.00	40.00	45.00	55.00
Iron Body Expansion Joints, Flanged.....	Each	18.00	20.00	25.00	35.00	40.00	50.00	55.00	65.00

PLUGS, ETC.

SIZE	Inches.	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	9	10	12
Plugs, Countersunk	Each	.02	.02	.02	.02	.03	.04	.05	.07	.10	.18	.25	.38	.42	.65	.88	1.20	1.85	2.75	3.25	3.75	5.00
Plugs, Solid	Each	.04	.04	.04	.04	.06	.08	.09	.11	.15	.27	.38	.57	.63	1.00	1.35	1.80	2.80	4.15	5.00	5.75	7.50
Plugs, L. H.	Each	.04	.04	.04	.04	.06	.08	.09	.11	.15	.27	.38	.57	.63	1.00	1.35	1.80	2.80	4.15	5.00	5.75	7.50
Bushings	Each	.04	.04	.04	.04	.06	.08	.09	.11	.15	.27	.38	.57	.63	1.00	1.35	1.80	2.80	4.15	5.00	5.75	7.50
Faced Bushings	Each	.04	.04	.04	.04	.06	.08	.09	.11	.15	.27	.38	.57	.63	1.00	1.35	1.80	2.80	4.15	5.00	5.75	7.50
Malleable Iron Unions	Each	.18	.18	.20	.22	.27	.33	.46	.58	.75	1.55	2.10	3.65	4.35								
Long Screws	Each	.30	.30	.35	.40	.55	.75	1.00	1.30	1.70	2.70	3.70	5.40	6.80								

GALVANIZED CAST AND WROUGHT FITTINGS.

SIZE.	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6
Ells, C. I.	.10	.10	.12	.16	.21	.32	.40	.56	1.00	1.50	2.10	2.40	3.50	4.00	5.50
Tees, C. I.	.16	.16	.18	.24	.30	.46	.58	.82	1.46	2.20	3.00	3.50	5.10	6.00	8.00
Unions, Malleable	.27	.30	.33	.40	.50	.70	.90	1.15	2.35	3.15	5.50	6.50	2.00	2.25	3.25
Couplings, Wrought	.35	.40	.50	.66	1.00	1.25	1.60	2.10	3.10	4.70					
Long Screws, Wrought	.35	.40	.50	.66	1.00	1.25	1.60	2.10	3.10	4.70					

KEYSTONE AND AMERICAN UNIONS.

SIZE.	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Plain, each	.20	.24	.28	.35	.40	.56	.80	.95	2.00	2.75
Galvanized, each	.24	.28	.35	.46	.55	.78	1.12	1.35	2.90	3.75

BRANCH TEES, HOOK PLATES, Etc.

NUMBER OF BRANCHES.....	1	2	3	4	5	6	7	8	9	10	11	12
1-in. Branch Tees, 1-in. or 1½-in. run.... Each	.90	1.05	1.15	1.35	1.60	1.90	2.20	2.65	3.15	3.75	4.40	
1-in. Branch Tees, 1½-in. run..... Each	1.00	1.15	1.30	1.45	1.75	2.20	2.45	2.90	3.30	4.50	4.75	
1-in. Branch Tees, 2-in. run..... Each	1.15	1.35	1.60	1.85	2.10	2.45	2.75	3.40	4.00	4.80	5.10	
1-in. Branch Tees, 2½-in. run..... Each	1.75	2.05	2.40	2.75	3.10	3.50	3.75	4.30	5.00	5.50	5.85	
1½-in. Branch Tees, 1½-in. or 1½-in. run.... Each	1.30	1.65	2.00	2.40	2.80	3.20	3.60	4.30	4.80	5.00	5.25	
1½-in. Branch Tees, 2-in. run..... Each	1.50	1.90	2.40	2.90	3.30	3.90	4.50	5.25	5.85	6.25	6.50	
1½-in. Branch Tees, 2½-in. run..... Each	1.95	2.40	2.85	3.55	3.95	4.20	4.95	6.15	6.85	7.25	7.65	
1½-in. Branch Tees, 1½-in. or 2-in. run.... Each	2.10	2.70	3.35	4.00	4.65	5.25	5.85	6.50	7.60	8.00	8.50	
1½-in. Branch Tees, 2½-in. run..... Each	2.85	3.45	4.15	5.00	5.75	6.50	7.00	8.25	9.25	9.75	10.50	
1½-in. Branch Tees, 3-in. run..... Each	3.15	3.80	4.60	5.50	6.25	7.25	7.75	9.00	10.00	10.75	11.50	
2-in. Branch Tees, 2-in. run..... Each	4.10	5.25	6.40	7.65	8.80	10.60	11.50	12.25	13.50	14.25	15.00	
2-in. Branch Tees, 2½-in. run..... Each	4.50	5.75	7.00	8.50	9.75	11.75	12.75	13.50	15.00	15.75	16.50	
2-in. Branch Tees, 3-in. run..... Each	4.50	5.75	7.00	8.50	9.75	11.75	12.75	13.50	15.00	15.75	16.50	
2-in. Branch Tees, 3½-in. run..... Each	5.00	6.25	7.75	9.25	10.75	13.00	14.00	15.00	16.50			
¾-in. Hook Plates..... Each	.08	.16	.21	.24	.28	.34	.40	.45	.50	.56	.68	.72
1-in. Hook Plates..... Each	.09	.18	.23	.26	.32	.38	.48	.59	.65	.70	.85	1.00
1½-in. Hook Plates..... Each	.10	.21	.27	.32	.41	.52	.68	.80	.90	1.20	1.35	1.40
1½-in. Hook Plates..... Each	.15	.28	.43	.58	.72	.88	1.10	1.25	1.40	1.55	1.65	1.90
2-in. Hook Plates..... Each	.22	.43	.65	.90	1.15	1.35						
¾-in. Expansion Hook Plates..... Each	.12	.23	.34	.45	.55	.65	.77	.90	1.05	1.25	1.45	1.65
1-in. Expansion Hook Plates..... Each	.15	.25	.35	.50	.60	.70	.80	.95	1.10	1.35	1.55	1.70
1½-in. Expansion Hook Plates..... Each	.17	.27	.40	.60	.70	.80	.90	1.15	1.30	1.50	1.70	2.00
1½-in. Expansion Hook Plates..... Each	.25	.40	.60	.75	.90	1.00						
1-in. Ring Plates..... Each	.16	.28	.41	.50	.62	.72	.96	1.00	1.20	1.30		
1½-in. Ring Plates..... Each	.21	.35	.50	.62	.75	1.10	1.25	1.40				

CAST IRON FLANGES.

SIZE.....Inches,	¾	1	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10	12
Dia. Fl'ges. 3 .. Each	.10	.10														
Dia. Fl'ges. 3½ .. Each	.15	.15	.15	.16												
Dia. Fl'ges. 4 .. Each	.22	.22	.22	.16	.16											
Dia. Fl'ges. 4½ .. Each	.25	.25	.25	.25	.25	.22										
Dia. Fl'ges. 5 .. Each	.35	.35	.30	.30	.30	.35										
Dia. Fl'ges. 5½ .. Each	.45	.45	.45	.40	.40	.40	.35	.40								
Dia. Fl'ges. 6 .. Each	.50	.50	.50	.42	.40	.40	.42	.42	.50							
Dia. Fl'ges. 6½ .. Each		.65	.60	.60	.60	.55	.50	.50	.65							
Dia. Fl'ges. 7 .. Each		.75	.75	.75	.70	.70	.62	.62	.62	.75						
Dia. Fl'ges. 7½ .. Each		.90	.90	.90	.85	.85	.80	.75	.85	.90						
Dia. Fl'ges. 8 .. Each	1.00	1.00	1.00	.95	.95	.90	.80	.90	.90	.90						
Dia. Fl'ges. 8½ .. Each	1.25	1.25	1.25	1.15	1.15	1.10	1.10	1.10	1.00	1.00						
Dia. Fl'ges. 9 .. Each			1.35	1.35	1.35	1.30	1.25	1.15	1.15	1.15	1.40					
Dia. Fl'ges. 9½ .. Each				1.90	1.90	1.75	1.75	1.60	1.60	1.50	1.25	1.50				
Dia. Fl'ges. 10 .. Each				2.25	2.25	2.15	2.00	1.80	1.50	1.50	1.50	1.50				
Dia. Fl'ges. 11 .. Each					2.50	2.50	2.25	2.25	2.00	1.75	1.75	1.75	2.20			
Dia. Fl'ges. 12 .. Each						3.00	3.00	2.75	2.50	2.50	2.20	2.20	2.80			
Dia. Fl'ges. 13 .. Each							3.50	3.50	3.25	3.00	3.00	2.80	2.80	2.80		
Dia. Fl'ges. 14 .. Each								4.00	4.00	3.75	3.75	3.50	3.25	3.25	3.75	4.00
Dia. Fl'ges. 15 .. Each													4.00	4.00	4.00	4.50
Dia. Fl'ges. 16 .. Each													5.00	5.00	5.00	6.00
Dia. Fl'ges. 17 .. Each													6.50	6.50	5.75	7.00
Dia. Fl'ges. 18 .. Each														8.00	8.00	7.00
Dia. Fl'ges. 19 .. Each															7.50	7.50
Dia. Fl'ges. 20 .. Each																8.50
Dia. Fl'ges. 21 .. Each																

IRON BODY VALVES.

IRON BODY GLOBE AND ANGLE VALVES—BRASS MOUNTED.

SIZE.....	1	1½	1¾	2	2½	3
I. B. Globe Valves, Screwed.....	2.25	2.75	3.50	5.40	7.35	9.80
I. B. Globe Valves, Flanged.....	3.25	3.85	4.80	7.00	9.00	12.50

IRON BODY GLOBE AND ANGLE VALVES—BRASS MOUNTED, WITH YOKE.

SIZE.....	2	2½	3	3½	4	4½	5	6	7	8
I. B. Globe Valves, with Yoke, Screwed....	7.00	9.00	12.50	15.25	19.00	24.00	27.00	37.50	63.00	72.00
I. B. Globe Valves, with Yoke, Flanged....	8.60	10.75	15.00	18.50	22.50	27.50	31.00	42.00	68.00	77.00

IRON BODY HOR. CHECK VALVES.

Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{4}$	3	$3\frac{1}{4}$	4	$4\frac{1}{4}$	5	6
	1.50	2.20	2.65	3.60	6.50	8.90	12.25	14.25	19.00	22.00	30.00

IRON BODY GATE VALVES—FLANGED AND SCREWED.

SIZE.....	2	2½	3	3½	4	5	6	7	8
I. B. Gate Valves, Flanged.....	10.00	12.00	15.00	18.00	20.00	25.00	30.00	40.00	50.00
I. B. Gate Valves, Screwed.....									

IRON BODY SAFETY VALVES—BRASS MOUNTED.

Size.....	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{4}$	3	3 $\frac{1}{4}$	4	4 $\frac{1}{2}$	5	6	7	8
Safety Valves, Screwed	3.50	4.00	5.00	5.80	7.80	13.25	17.25	23.00	28.75	34.50	41.50	57.75	93.50	132.00
Safety Valves, Flanged	5.50	6.75	7.75	10.25	16.00	21.50	27.50	34.00	40.00	48.00	65.00	100.00	140.00	

HUB-END GATE VALVE.

IRON BODY—BRASS MOUNTED.

Size									3	4	6	8	10	12
									15.00	20.00	30.00	50.00	65.00	90.00

Size	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6
All-Iron Cocks .....	.85	.90	1.05	1.30	1.60	1.95	2.70	4.40	6.75	12.00	15.50	.....	32.00	45.00
All-Iron 3-Way Cocks..	.....	.....	1.65	1.80	2.05	2.65	3.65	5.35	7.50	14.00	19.00	.....	38.50	52.00

COMMON BRASS VALVES.

GLOBE AND ANGLE.

SIZE.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Globe and Angle .....	.72	.72	.77	1.00	1.26	1.80	2.52	3.50	5.30	10.00	14.40

BRASS CHECK VALVES.

HORIZONTAL AND VERTICAL.

SIZE.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Check, Horizontal.....	.65	.65	.70	.90	1.15	1.60	2.25	3.15	4.75	9.00	13.00
Check, Vertical .....		.72	.77	1.00	1.26	1.80	2.52	3.50	5.30	10.00	14.40

BRASS CHECK VALVES.

STRAIGHTWAY.

SIZE.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Straightway Check	1.25	1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

BRASS GATE VALVES.

SIZE.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Brass Gate Valve	1.30	1.75	2.50	3.50	5.00	7.50	15.00	22.00

FAIRBANKS' VALVES.

BRASS GLOBE AND ANGLE VALVES.

SIZE	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
Price	1.10	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Distance End to End	1 $\frac{1}{2}$	1 $\frac{1}{8}$	2	2 $\frac{1}{8}$	3 $\frac{3}{8}$	3 $\frac{1}{2}$	4 $\frac{3}{8}$	4 $\frac{1}{2}$	5 $\frac{1}{8}$	6 $\frac{1}{8}$	7

I. B. GLOBE AND ANGLE VALVES, SCREWED.

SIZE	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4
Price	5.00	7.25	11.00	16.00	18.50	23.00
Distance End to End	5	6	7 $\frac{1}{8}$	8 $\frac{1}{8}$	9 $\frac{1}{8}$	10 $\frac{1}{8}$

I. B. GLOBE AND ANGLE VALVES, WITH YOKE SCREWED.

SIZE	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	9	10	12
Price	10.00	12.00	16.75	19.50	24.00	32.00	40.00	48.00	80.00	90.00	.....	130.00	185.00
Distance End to End ..	6	7 $\frac{1}{8}$	8 $\frac{1}{8}$	9 $\frac{1}{8}$	10 $\frac{1}{8}$	10 $\frac{1}{4}$	11 $\frac{1}{4}$	13 $\frac{1}{4}$	14 $\frac{1}{4}$	16 $\frac{1}{4}$	.....	20	23 $\frac{1}{4}$

BRASS GATE VALVE, SCREWED.

SIZE	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4
Price	1.50	1.50	1.65	2.20	2.80	4.00	5.30	7.80	17.00	23.00	45.00	56.00
Distance End to End	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{8}$	3 $\frac{1}{4}$	4 $\frac{1}{8}$	4 $\frac{1}{8}$	6 $\frac{1}{8}$	7 $\frac{1}{8}$	8 $\frac{1}{8}$	8 $\frac{1}{8}$

I. B. GATE VALVE, SCREWED.

SIZE	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4
Price	7.50	10.75	14.00	18.25	20.50
Distance End to End	5 $\frac{1}{2}$	6 $\frac{1}{8}$	7 $\frac{1}{8}$	8 $\frac{1}{8}$	8 $\frac{1}{8}$

DISCS FOR BRASS GLOBE AND ANGLE VALVES.

SIZE	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4
Price .....	.13	.14	.07	.09	.10	.12	.18	.25	.36	.48	.60	1.50	2.00

DISCS FOR I. B. GLOBE AND ANGLE VALVES.

SIZE	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	9	10	12	14
Price .....	.25	.36	.48	.60	.75	.90	1.10	1.25	1.60	2.40	2.90	4.75	4.75	5.50	7.75

RENEWABLE VULCANIZED ASBESTOS SEAT GATE VALVES.
STRAIGHTWAY SWINGING CHECK VALVES.
AMMONIA COCKS AND AMMONIA GAUGES.
ASBESTOS-PACKED COCKS.

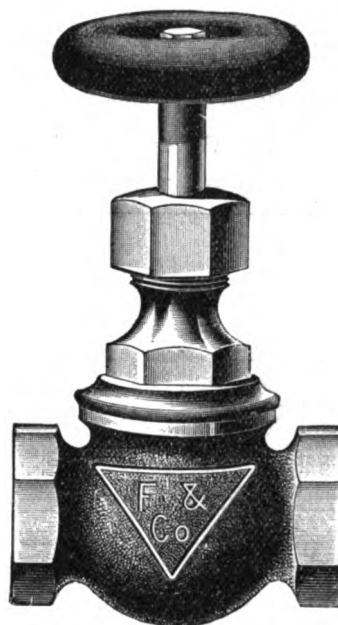


Fairbanks'

RENEWABLE VULCANIZED ASBESTOS DISC
GLOBE VALVES.



The Fairbanks Company, Baltimore, Md.



J. R. WILLIAMS.

E. R. WILLIAMS.

J. R. WILLIAMS & CO.

✦ MANUFACTURERS AND
DEALERS OF THE..... ✦

Buckingham Virginia Slate,

FROM THE

CELEBRATED "OLD NICHOLAS" QUARRIES, ARVONIA, VA.

P. O. BOX 103. 'PHONE 162.

18 S. Ninth Street, RICHMOND, VIRGINIA.

First Award, London, 1857.

Gold Medal, Philadelphia, 1876.

Gold Medal, Chicago, 1893.

GLOBE, ANGLE AND CROSS VALVES.

Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
Brass, Globe and Angle Valves, screwed.....	1.10	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
flanged.....	3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Brass Cross Valves, screwed.....	1.70	2.00	2.25	2.50	3.25	4.75	6.25	9.50	20.00	27.50
flanged.....	8.64	11.45	15.10	22.70	32.82	44.30
Brass Hose End Globe and Angle Valves.....	3.30	4.70	6.50	9.15	17.10	23.35

IRON BODY, COMPOSITION MOUNTED.

Size.....	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	9	10	12
Globe and Angle Valves:																	
Brass Hub, scr'd..	2.75	2.85	3.85	5.00	7.25	11.00	16.00										
“ “ flang'd					8.50	13.00	18.00										
With Yoke, scr'd..					10.00	12.00	16.75	19.50	24.00	32.00	40.00	48.00	80.00	90.00	121.00	130.00	185.00
“ “ flang'd					11.75	14.00	18.50	21.50	26.00	34.00	42.00	50.00	80.00	90.00	121.00	130.00	185.00
Cross Valves, scr'd..						16.00	21.00	26.00	30.00	42.00	45.00	58.00					
“ “ flang'd						19.00	24.00	29.00	33.00	45.00	48.00	62.00					
Size.....											14	16	18	20	24		
Globe and Angle Valves, with Yoke, flanged.....											334.00	400.00	511.00	578.00	1222.00		

PRICE LIST OF THE JENKINS' GATE VALVES.

Size.....	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
Brass Gate Valves, screwed	2.00	2.50	3.25	4.25	5.25	7.50	14.00	20.00
" " flanged	3.50	4.50	6.00	7.50	10.00	14.00	21.00	28.00
Brass Hose Gate Valves.....			3.70	4.95	6.15	8.75	15.75	22.00
Hose Caps, rough, without chain or swivel.....		.60	.75	1.15	1.50	2.00	2.50	
" " finished, with chain.....		1.00	1.25	1.75	2.25	3.00	3.50	

IRON BODY, COMPOSITION MOUNTED.

Size.....	2	2½	3	3½	4	4½	5	6	7	8	10	12
Gate Valves, screwed	8.00	12.00	15.00	18.00	21.00	29.00	30.00	36.00	50.00	62.00	85.00	120.00
“ “ flanged	9.00	13.00	16.00	19.00	22.50	31.00	32.00	38.00	50.00	62.00	85.00	120.00
Hub or Spigot Gate Valves	9.00	12.00	15.00	18.00	21.00	29.00	30.00	36.00	50.00	62.00	85.00	120.00
Diameter of flanges—Gate Valves	6	7	7½	8½	9	9½	10	11	12½	13½	16	19
Face to face—Gate Valves, scr'd and fld'd ..	6	7¼	7⅝	7⅝	8¾	8⅞	9½	10	11	12¾	14¼	14⅝

PRICE LIST OF JENKINS' DISCS FOR VALVES.

Size.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	9	10	12	14	16	18	20	24
Price.....	.03	.04	.04	.05	.06	.09	.12	.18	.24	.33	.45	.52	.60	.68	.90	.98	1.20	1.60	1.75	2.25	3.00	4.00	5.00	6.00	9.00

SYDNOR & HUNDLEY



at their BRANCH

No. 2, OLD CITY HALL BUILDING,
RICHMOND, VA. _____

A Large and Very Complete Stock of . . .

Office Desks! Office Chairs!

Office Files! Etc., Etc.!

_____CORRESPONDENCE SOLICITED.

DEALERS

New Car Wheels and Axles

NEW AND SECOND-HAND FREIGHT CARS

...AND OTHER EQUIPMENT.

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Scrap Material.

⚡ Relaying Rails.

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NEW YORK.

MAY & SPALDING,

Equitable Building,
ATLANTA, GA.

ROBERT W. HUNT & CO.,

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Bureau of Inspection, Tests and Consultation,

INSPECTION OF

Steel Rails, Splice Bars, Railroad

Cars, Wheels, Axles, Etc.

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CHEMICAL LABORATORY.

Analysis of Ores, Iron, Steel, Oils,
Water, Etc., Etc.



PHYSICAL LABORATORY.

Test of Metals, Drop and Pulling Test
of Couplers, Draw Bars, Etc.

EFFICIENCY TESTS OF BOILERS, ENGINES AND LOCOMOTIVES.

BIBB COCKS.

COMPRESSION BIBBS FOR IRON PIPE.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{3}{4}$
Compression Bibb, Finished..... Per dozen	12.00	13.00	15.00	20.00	37.00	56.00	86.00
Compression Bibb, Rough..... Per dozen	11.50	12.50	14.00	19.00	33.00	48.00	74.00
Compression Hose Bibb, Finished ... Per dozen	14.00	15.00	17.00	22.00	40.00	60.00	92.00
Compression Hose Bibb, Rough..... Per dozen	13.50	14.50	16.00	21.00	36.00	52.00	80.00

COMPRESSION BIBBS FOR LEAD PIPE.

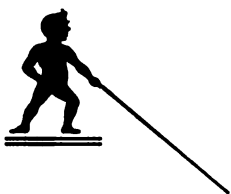
Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{3}{4}$
Finished Per dozen	10.00	11.00	13.00	18.00	34.00	52.00	80.00
Rough Per dozen	9.50	10.50	12.00	17.00	30.00	44.00	68.00
Finished Per dozen	12.00	13.00	15.00	20.00	37.00	56.00	86.00
Rough Per dozen	11.50	12.50	14.00	19.00	33.00	48.00	74.00

SHIP AUGERS.

PRICES, EITHER WITH SCREWS OR WITHOUT SCREWS.

SIZE.	PER DOZEN.
$\frac{1}{2}$ inch and under	\$ 7.50
9 and 10-16 inch	9.00
11 and 12-16 inch	10.50
13 and 14-16 inch	12.00
15 and 16-16 inch	13.50
17 and 18-16 inch	15.00
19 and 20-16 inch	16.50
21 and 22-16 inch	18.00
23 and 24-16 inch	21.00
25 and 26-16 inch	24.00
27 and 28-16 inch	25.50
29 and 30-16 inch	27.00
31 and 32-16 inch	31.50
33 and 34-16 inch	48.00
35 and 36-16 inch	60.00
37 and 38-16 inch	72.00
39 and 40-16 inch	84.00
41 and 42-16 inch	96.00
43 and 44-16 inch	108.00
45 and 46-16 inch	120.00
47 and 48-16 inch	132.00
59 and 60-16 inch	204.00

The usual twist for ship augers from 6 to 8-16 inch is from 7 $\frac{1}{2}$ to 8 $\frac{1}{2}$ inches. Sizes from 9 to 17-16 inch, the twist will run about 12 inches. Sizes from 18 to 30-16 inch will average about 15-inch twist. Boxes of one-half-dozen.



THE JANNEY COUPLER.

THE BUHOUP VESTIBULE.

THE BUHOUP "3-STEM" COUPLER.

THE CURTIS PIVOTED TENDER COUPLER.



*Good Investments for any
Up-to-Date Railroad*



MADE ONLY BY

THE McCONWAY & TORLEY CO.

PITTSBURGH, PENNSYLVANIA.

RUBBER BELTING.

INCH.	2-PLY.	3-PLY.	4-PLY.	5-PLY.	6-PLY.	7-PLY.	8-PLY.
1	.07	.09	.11				
1½	.09	.11	.13				
1¾	.11	.13	.15	.19			
1½	.13	.15	.17	.21			
2	.15	.17	.21	.28	.31		
2½	.18	.22	.28	.32	.39		
3	.22	.28	.31	.38	.46		
3½	.26	.30	.37	.46	.55		
4	.30	.34	.42	.52	.63	.73	
4½	.33	.39	.47	.58	.70	.82	
5	.36	.43	.52	.65	.78	.91	
6	.43	.52	.62	.77	.93	1.08	1.24
7	.51	.60	.73	.91	1.09	1.27	1.46
8	.59	.70	.84	1.05	1.26	1.47	1.68
9	.67	.80	.95	1.18	1.42	1.66	1.90
10	.75	.90	1.07	1.33	1.60	1.87	2.14
11	.83	1.00	1.18	1.47	1.77	2.08	2.36
12	.91	1.08	1.30	1.62	1.95	2.27	2.60
13	1.00	1.18	1.42	1.77	2.13	2.48	2.84
14	1.08	1.28	1.54	1.92	2.31	2.69	3.08
15	1.16	1.38	1.66	2.07	2.49	2.90	3.32
16	1.25	1.50	1.78	2.22	2.67	3.11	3.56
18	1.41	1.70	2.02	2.52	3.03	3.53	4.04
20	1.58	1.90	2.26	2.82	3.39	3.95	4.52
22	1.76	2.12	2.52	3.15	3.78	4.41	5.04
24	1.96	2.36	2.80	3.50	4.20	4.90	5.60
26	2.16	2.60	3.08	3.85	4.62	5.39	6.16
28	2.36	2.84	3.36	4.20	5.04	5.88	6.72
30			3.64	4.55	5.46	6.37	7.28
32			3.92	4.90	5.88	6.86	7.84
34			4.20	5.25	6.30	7.35	8.40
36			4.48	5.60	6.72	7.84	8.96
38			4.76	5.95	7.14	8.33	9.52
40			5.04	6.30	7.56	8.82	10.08
42			5.32	6.65	7.98	9.31	10.64
44			5.60	7.00	8.40	9.80	11.20
46			5.88	7.35	8.82	10.29	11.76
48			6.16	7.70	9.24	10.78	12.32
50			6.44	8.05	9.66	11.27	12.88
52			6.72	8.40	10.08	11.76	13.44
54			7.00	8.75	10.50	12.25	14.00
56			7.28	9.10	10.92	12.74	14.56
58			7.56	9.45	11.34	13.23	15.12
60			7.84	9.80	11.76	13.72	15.68

Goodrich Rubber Goods.



Air-Brake Hose.

Steam-Heating Hose.

Conducting Hose.

Belting, Packing.

Gaskets, Valves, Etc.

SAMPLES AND PRICES CHEERFULLY SUBMITTED.

The B. F. GOODRICH COMPANY,

AKRON RUBBER WORKS, AKRON, O.

NEW YORK.

CHICAGO.

SAN FRANCISCO.

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WEIR FROG COMPANY,

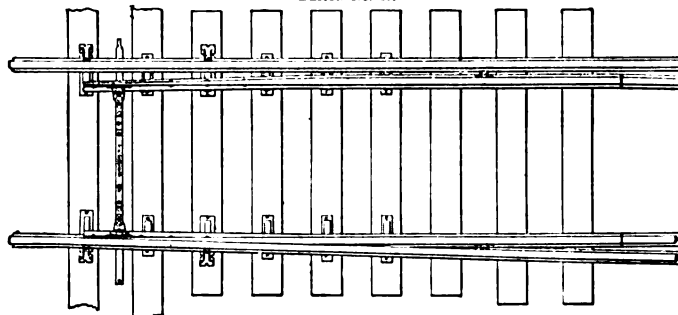
MANUFACTURERS

Modern * Track * Equipment.

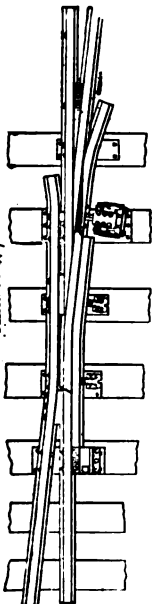
Rigid and Spring Frogs,
Split Switches, Crossings,
Switch Stands, Rail Braces.

CINCINNATI, O.

SPLIT SWITCH, WITH ADJUSTABLE HEAD-ROD AND REINFORCED SWITCH-RAILS.
DESIGN No. 19.



SPRING-RAIL FROG, WITH HINGED MOVABLE-WING RAIL.
DESIGN No. 44.



UNIFORM PRICE-LIST OF LEATHER BELTING.

Revised November 15, 1899.

DOUBLE BELTS, DOUBLE PRICE.

$\frac{1}{8}$ inch, per running foot...	.08	6 inch, per running foot...	1.11	25 inch, per running foot...	4.63
$\frac{1}{8}$ " " " " " "	.10	$6\frac{1}{8}$ " " " " " "	1.20	26 " " " " " "	4.81
$\frac{1}{4}$ " " " " " "	.12	7 " " " " " "	1.30	27 " " " " " "	5.00
$\frac{1}{4}$ " " " " " "	.13	8 " " " " " "	1.48	28 " " " " " "	5.18
$\frac{1}{2}$ " " " " " "	.14	9 " " " " " "	1.67	30 " " " " " "	5.55
$1\frac{1}{8}$ " " " " " "	.19	10 " " " " " "	1.85	32 " " " " " "	5.92
$1\frac{1}{4}$ " " " " " "	.24	11 " " " " " "	2.04	34 " " " " " "	6.29
$1\frac{1}{2}$ " " " " " "	.29	12 " " " " " "	2.22	36 " " " " " "	6.66
2 " " " " " "	.34	13 " " " " " "	2.41	40 " " " " " "	7.40
$2\frac{1}{8}$ " " " " " "	.39	14 " " " " " "	2.59	44 " " " " " "	8.14
$2\frac{1}{4}$ " " " " " "	.43	15 " " " " " "	2.78	48 " " " " " "	8.88
$2\frac{1}{2}$ " " " " " "	.48	16 " " " " " "	2.96	52 " " " " " "	9.62
3 " " " " " "	.53	17 " " " " " "	3.15	56 " " " " " "	10.36
$3\frac{1}{8}$ " " " " " "	.58	18 " " " " " "	3.33	60 " " " " " "	11.10
$3\frac{1}{4}$ " " " " " "	.63	19 " " " " " "	3.52	64 " " " " " "	11.84
$3\frac{1}{2}$ " " " " " "	.67	20 " " " " " "	3.70	68 " " " " " "	12.58
4 " " " " " "	.72	21 " " " " " "	3.89	72 " " " " " "	13.32
$4\frac{1}{8}$ " " " " " "	.82	22 " " " " " "	4.07	78 " " " " " "	14.43
5 " " " " " "	.91	23 " " " " " "	4.26	84 " " " " " "	15.54
$5\frac{1}{2}$ " " " " " "	1.01	24 " " " " " "	4.44		

CUT LACE.

$\frac{1}{8}$ inch, per 100 feet.....	1.00	$\frac{7}{8}$ inch, per 100 feet.....	1.75	$\frac{3}{4}$ inch, per 100 feet.....	3.25
$\frac{1}{4}$ " " " ".....	1.25	" " " ".....	2.00	" " " ".....	4.00
$\frac{3}{8}$ " " " ".....	1.50	" " " ".....	2.75	1 " " " ".....	4.75

TWIST.

$\frac{1}{8}$ "	inch, per running foot....	.06	$\frac{3}{4}$ "	inch, per running foot....	.22	$1\frac{1}{4}$ "	inch, per running foot....	.60
$1\frac{1}{8}$"	" " " " .....	.10	$\frac{7}{8}$"	" " " " .....	.30	$1\frac{3}{4}$"	" " " " ....	.72
$\frac{1}{4}$"	" " " " .....	.14	$\frac{1}{2}$"	" " " " .....	.36			
$\frac{5}{8}$"	" " " " .....	.18	$\frac{3}{8}$"	" " " " .....	.46			

COTTON BELTING.

GANDY, LEVIATHAN, CHESAPEAKE OR MAIN COTTON BELTING.

FOUR-PLY.

1½ inch, per foot	14	4 inch, per foot	.38	8 inch, per foot	.72
2 " " " "	18	4½ " " " "	.41	9 " " " "	.81
2½ " " " "	23	5 " " " "	.45	10 " " " "	.90
3 " " " "	27	6 " " " "	.54	11 " " " "	.99
3½ " " " "	32	7 " " " "	.63	12 " " " "	1.08

SIX-PLY.

3	inch, per foot	.38	8	inch, per foot	.96	15	inch, per foot	1 80
3 $\frac{1}{2}$	" " "	.42	9	" " "	1.08	16	" " "	1 92
4	" " "	.48	10	" " "	1.20	17	" " "	2 04
4 $\frac{1}{2}$	" " "	.54	11	" " "	1.32	18	" " "	2 16
5	" " "	.60	12	" " "	1.44	20	" " "	2 40
6	" " "	.72	13	" " "	1.56	22	" " "	2 64
7	" " "	.84	14	" " "	1.68	24	" " "	2 88

EIGHT-PLY.

12 inch, per foot.....	1.80	22 inch, per foot.....	3.30	38 inch, per foot.....	5.40
13 " " ".....	1.95	24 " " ".....	3.60	38 " " ".....	5.70
14 " " ".....	2.10	26 " " ".....	3.90	40 " " ".....	6.00
15 " " ".....	2.25	28 " " ".....	4.20	42 " " ".....	6.30
16 " " ".....	2.40	30 " " ".....	4.50	44 " " ".....	6.60
18 " " ".....	2.70	32 " " ".....	4.80	46 " " ".....	6.90
20 " " ".....	3.00	34 " " ".....	5.10	48 " " ".....	7.20

STANDARD WOOD SPLIT PULLEY LIST.—Abridged.

	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24	
3	1.90	2.00	2.10	2.25	2.40	2.60	2.85	3.10	3.60	4.10	4.75					
4	2.00	2.10	2.20	2.40	2.60	2.85	3.10	3.35	3.85	4.40	5.10					
5	2.10	2.20	2.40	2.60	2.85	3.10	3.35	3.60	4.10	4.75	5.45					
6	2.20	2.35	2.55	2.75	3.00	3.25	3.50	3.75	4.30	5.00	5.70					
7	2.30	2.45	2.65	2.85	3.10	3.35	3.60	3.85	4.50	5.20	5.90					
8	2.45	2.60	2.80	3.00	3.25	3.50	3.75	4.00	4.65	5.40	6.20					
9	2.60	2.80	3.00	3.25	3.50	3.75	4.00	4.30	5.00	5.80	6.60					
10	2.80	3.00	3.25	3.50	3.75	4.00	4.30	4.65	5.40	6.20	7.00					
11	3.00	3.25	3.50	3.75	4.00	4.30	4.65	5.00	5.80	6.60	7.50					
12	3.15	3.40	3.65	3.90	4.20	4.55	4.90	5.30	6.10	6.90	7.90					
13	3.30	3.55	3.80	4.10	4.45	4.80	5.20	5.60	6.40	7.30	8.40					
14	3.45	3.70	4.00	4.35	4.70	5.10	5.55	6.00	6.90	7.90	9.10					
15	3.60	3.90	4.25	4.60	5.00	5.45	5.90	6.35	7.30	8.40	9.60					
16	3.80	4.15	4.50	5.00	5.50	6.00	6.50	7.00	8.00	9.00	10.30					
17	4.00	4.40	4.90	5.40	5.90	6.40	6.90	7.40	8.40	9.50	11.00					
18	4.20	4.70	5.20	5.70	6.20	6.70	7.20	7.80	9.00	10.80	11.90					
19	4.40	4.90	5.40	5.90	6.50	7.10	7.70	8.30	9.50	11.00	12.60					
20	4.60	5.20	5.80	6.40	7.00	7.60	8.30	9.00	10.40	12.00	13.80	15.60	17.50	19.60	21.80	20
21	4.80	5.40	6.00	6.60	7.30	8.00	8.70	9.40	11.00	12.70	14.50	16.50	18.60	20.80	23.20	21
22	5.00	5.60	6.30	7.00	7.70	8.40	9.20	10.00	11.70	13.50	15.50	17.70	20.00	22.40	24.80	22
23	5.20	5.80	6.50	7.20	8.00	8.80	9.70	10.60	12.50	14.70	17.00	19.40	21.80	24.30	26.80	23
24	5.50	6.20	7.00	7.80	8.60	9.40	10.30	11.20	13.00	15.30	17.70	20.20	22.80	25.40	28.20	24
25	5.90	6.60	7.30	8.10	9.00	10.00	11.00	12.00	14.00	16.40	19.00	21.80	24.60	27.50	30.50	25
26	6.20	7.00	7.80	8.60	9.50	10.50	11.50	12.60	15.00	17.60	20.40	23.30	26.30	29.50	32.70	26
27	6.60	7.40	8.20	9.00	10.00	11.10	12.20	13.40	15.80	18.60	21.50	24.50	27.70	30.90	34.10	27
28	7.00	7.80	8.60	9.50	10.50	11.60	12.80	14.00	16.50	19.40	22.40	25.60	28.80	32.00	35.30	28
29	7.30	8.20	9.10	10.00	11.10	12.30	13.50	14.75	17.50	20.50	23.70	27.00	30.40	33.80	37.20	29
30	7.70	8.60	9.50	10.60	11.80	13.00	14.30	15.60	18.50	21.60	25.00	28.50	32.00	35.50	39.00	30
31	8.00	9.00	10.00	11.10	12.35	13.60	15.00	16.50	19.60	22.80	26.40	30.00	33.60	37.20	40.80	31
32	8.50	9.50	10.50	11.60	12.85	14.10	15.50	17.00	20.30	23.60	27.40	31.00	35.00	39.00	43.00	32
33	9.00	10.00	11.15	12.35	13.65	15.00	16.45	18.00	21.40	24.95	28.80	32.30	36.40	40.60	44.90	33
34	9.40	10.60	11.80	13.10	14.45	15.90	17.40	19.00	22.50	26.10	29.80	33.60	37.80	42.20	46.80	34
35	9.85	11.15	12.45	13.85	15.25	16.80	18.35	20.00	23.50	27.20	31.00	34.90	39.20	43.80	48.70	35
36	10.30	11.70	13.10	14.60	16.10	17.70	19.30	21.00	24.60	28.00	32.00	36.00	40.00	45.00	50.00	36
38	.....	12.80	14.40	16.00	17.70	19.50	21.20	23.00	26.00	30.00	34.00	38.00	43.00	48.00	54.00	38
40	.....	13.90	15.70	17.50	19.30	21.25	23.10	25.00	28.00	32.00	36.00	41.00	46.00	51.00	58.00	40
42	.....	15.00	17.00	19.00	21.00	23.00	25.00	27.00	31.00	35.00	39.00	44.00	49.00	55.00	62.00	42
44	.....	17.00	19.00	21.00	23.00	25.00	27.00	29.00	33.00	37.00	42.00	47.00	53.00	60.00	67.00	44
46	.....	19.00	21.00	23.00	25.00	27.00	29.00	31.00	36.00	40.00	45.00	51.00	57.00	65.00	73.00	46
48	.....	21.00	23.00	25.00	27.00	29.00	31.50	33.90	38.50	43.00	48.00	54.00	61.00	70.00	78.00	48
50	.....	.....	25.00	27.00	29.00	31.00	33.70	36.20	41.00	46.00	51.00	58.00	65.00	75.00	84.00	50
52	.....	.....	28.00	30.00	32.00	34.00	36.00	38.50	43.50	49.00	55.00	62.00	70.00	80.00	90.00	52
54	.....	.....	30.00	32.00	34.00	36.00	38.50	41.20	46.00	52.00	59.00	66.00	75.00	85.00	95.00	54
56	.....	.....	.....	35.00	37.00	39.00	41.00	43.00	49.00	55.00	63.00	71.00	80.00	90.00	101.00	56
58	.....	.....	.....	38.00	40.00	42.00	44.00	46.00	52.00	59.00	67.00	75.00	85.00	95.00	106.00	58
60	.....	.....	.....	41.00	43.00	45.00	47.00	49.00	55.00	62.00	71.00	80.00	90.00	100.00	112.00	60
62	.....	.....	.....	44.00	46.00	48.00	50.00	52.00	58.00	66.00	75.00	85.00	95.00	106.00	118.00	62
64	.....	.....	.....	46.00	48.00	50.00	52.00	55.00	61.00	69.00	79.00	89.00	99.00	110.00	123.00	64
66	.....	.....	.....	48.00	50.00	52.00	54.00	57.00	64.00	73.00	83.00	93.00	103.00	115.00	129.00	66
68	.....	.....	.....	50.00	52.00	54.00	56.00	60.00	68.00	77.00	87.00	97.00	108.00	120.00	134.00	68
70	.....	.....	.....	52.00	54.00	56.00	59.00	63.00	71.00	81.00	91.00	101.00	112.00	125.00	140.00	70
72	.....	.....	.....	54.00	56.00	58.00	62.00	66.00	75.00	85.00	95.00	105.00	117.00	130.00	146.00	72
74	.....	.....	.....	58.00	60.00	62.00	66.00	70.00	80.00	90.00	100.00	110.00	122.00	135.00	152.00	74
76	.....	.....	.....	62.00	64.00	66.00	71.00	75.00	85.00	95.00	105.00	116.00	128.00	141.00	158.00	76
78	.....	.....	.....	.....	.....	71.00	75.00	80.00	90.00	100.00	110.00	121.00	133.00	147.00	164.00	78
80	.....	.....	.....	.....	.....	75.00	80.00	85.00	95.00	105.00	115.00	127.00	139.00	153.00	170.00	80
82	.....	.....	.....	.....	.....	80.00	85.00	90.00	100.00	110.00	121.00	133.00	145.00	159.00	176.00	82
84	.....	.....	.....	.....	.....	85.00	90.00	95.00	107.00	118.00	130.00	143.00	156.00	170.00	188.00	84
86	.....	.....	.....	.....	.....	90.00	95.00	102.00	114.00	126.00	139.00	153.00	167.00	182.00	200.00	86
88	.....	.....	.....	.....	.....	95.00	101.00	108.00	121.00	134.00	148.00	163.00	178.00	194.00	212.00	88
90	.....	.....	.....	.....	.....	100.00	107.00	114.00	128.00	142.00	157.00	173.00	189.00	206.00	225.00	90
92	.....	.....	.....	.....	.....	105.00	112.00	120.00	135.00	150.00	166.00	183.00	200.00	218.00	237.00	92
94	.....	.....	.....	.....	.....	110.00	118.00	126.00	142.00	158.00	175.00	193.00	211.00	229.00	249.00	94
96	.....	.....	.....	.....	.....	115.00	123.00	132.00	149.00	166.00	184.00	203.00	222.00	241.00	262.00	96
98	.....	.....	.....	.....	.....	120.00	129.00	138.00	156.00	174.00	193.00	213.00	233.00	253.00	274.00	98
100	.....	.....	.....	.....	.....	125.00	134.00	144.00	163.00	182.00	202.00	223.00	244.00	265.00	286.00	100

Manufacturers' Standard List of Machine Bolts,

WITH SQUARE HEADS AND SQUARE NUTS.—FINISHED POINTS.

PRICE PER HUNDRED.

Adopted September 20, 1899.

Effective October 1, 1899.

LENGTH.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{9}{16}$ & $\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$
1½ inches	1.70	2.00	2.40	2.80	3.60	5.20	7.20	10.50	15.10	22.50	30.00
2 inches	1.78	2.12	2.56	3.00	3.88	5.58	7.70	11.20	16.00	23.70	31.50
2½ inches	1.86	2.24	2.72	3.20	4.12	5.96	8.20	11.90	16.90	24.90	33.00
3 inches	1.94	2.36	2.88	3.40	4.38	6.34	8.70	12.60	17.80	26.10	34.50
3½ inches	2.02	2.48	3.04	3.60	4.64	6.72	9.20	13.30	18.70	27.90	36.00
4 inches	2.10	2.60	3.20	3.80	4.90	7.10	9.70	14.00	19.60	28.50	37.50
4½ inches	2.18	2.72	3.36	4.00	5.16	7.48	10.20	14.70	20.50	29.70	39.00
5 inches	2.26	2.84	3.52	4.20	5.42	7.86	10.70	15.40	21.40	30.90	40.50
5½ inches	2.34	2.96	3.68	4.40	5.68	8.24	11.20	16.10	22.30	32.10	42.00
6 inches	2.42	3.08	3.84	4.60	5.94	8.62	11.70	16.80	23.20	33.30	43.50
6½ inches	2.50	3.20	4.00	4.80	6.20	9.00	12.20	17.50	24.10	34.50	45.00
7 inches	2.58	3.32	4.16	5.00	6.46	9.38	12.70	18.20	25.00	35.70	46.50
7½ inches	2.66	3.44	4.32	5.20	6.72	9.76	13.20	18.90	25.90	36.90	48.00
8 inches	2.74	3.56	4.48	5.40	6.98	10.14	13.70	19.60	26.80	38.10	49.50
9 inches	2.90	3.80	4.80	5.80	7.50	10.90	14.70	21.00	28.60	40.50	52.50
10 inches	3.08	4.04	5.12	6.20	8.02	11.66	15.70	22.40	30.40	42.90	55.50
11 inches	3.22	4.28	5.44	6.60	8.54	12.42	16.70	23.80	32.20	45.30	58.50
12 inches	3.38	4.52	5.76	7.00	9.06	13.18	17.70	25.20	34.00	47.70	61.50
13 inches			6.08	7.40	9.58	13.94	18.70	26.60	35.80	50.10	64.50
14 inches			6.40	7.80	10.10	14.70	19.70	28.00	37.60	52.50	67.50
15 inches			6.72	8.20	10.62	15.46	20.70	29.40	39.40	54.90	70.50
16 inches			7.04	8.60	11.14	16.22	21.70	30.80	41.20	57.30	73.50
17 inches					11.66	16.98	22.70	32.20	43.00	59.70	76.50
18 inches					12.18	17.74	23.70	33.60	44.80	62.10	79.50
19 inches					12.70	18.50	24.70	35.00	46.60	64.50	82.50
20 inches					13.22	19.26	25.70	36.40	48.40	66.90	85.50
21 inches							26.70	37.80	50.20	69.30	88.50
22 inches							27.70	39.20	52.00	71.70	91.50
23 inches							28.70	40.60	53.80	74.10	94.50
24 inches							29.70	42.00	55.60	76.50	97.50
25 inches							30.70	43.40	57.40	78.90	100.50
26 inches							31.70	44.80	59.20	81.30	103.50
27 inches							32.70	46.20	61.00	83.70	106.50
28 inches							33.70	47.60	62.80	86.10	109.50
29 inches							34.70	49.00	64.60	88.50	112.50
30 inches							35.70	50.40	66.40	90.90	115.50

The following extras are to be understood as a part of the Machine Bolt List:

Bolts with Hexagon Heads or Hexagon Nuts, 10% extra.

If both Hexagon Heads and Hexagon Nuts, 20% extra.

Joint Bolts with Oblong Nuts and Bolts with Tee Heads, 10% extra.

WROUGHT WASHERS.

SIZE	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2															
PRICE	14	0	12	2	11	4	10	5	9	7	9	2	9	1	9	0	8	8	8	8	8	8	9	0	9	0	9	2	9	5	9	5

GEORGE H. CLAPP, Chairman.
A. B. BELLOWS, V.-Chairman and Manager.

LACY S. McKEEVER, Treasurer.
JOHN M. BAILEY, Secretary.

Pittsburgh Testing Laboratory, Limited,



Inspecting and Metallurgical
Engineers and Chemists...



Main Laboratories, PITTSBURGH, PA., 325 Water Street.



NEW YORK OFFICE,

60 New Street, New York,
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CHICAGO, ILL.**

1750 The Monadnock Block,
T. L. CONDRON, Res. Engineer.

**EASTERN OFFICE.
PHILADELPHIA, PA.**

18 South Broad Street,
H. A. SCHOFIELD, Res. Engineer.

**SOUTHERN OFFICE,
RICHMOND, VA.**

1112 East Main Street,
E. T. D. MYERS, Jr., Res. Engineer.



Specialties.....

Inspection of Rails and Materials for Bridges, Buildings and Other Structures, Steam Boilers, Locomotives, Cars, **Steel Cars**, Axles, Wheels, Air-Brake Hose, Boiler and Firebox Plate. Inspection of Shop Work and Erection at Bridge site. Inspection of Ship-building Materials and Machinery. Chemical Analyses and Physical Tests of all kinds. Water-Softening Plants for Railroads and Cities. Experts before the Courts. Consultation and Special Investigation, and Reports on Chemical and Engineering matters.

Inspectors and Engineers located permanently at all leading mills, shops and factories.

Manufacturers' Standard List of Coach and Lag Screws, WITH SQUARE HEADS.

PRICE PER HUNDRED.

Adopted September 20, 1899.

Effective October 1, 1899.

LENGTH.	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{8}$ & $\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{1}{8}$	1
$1\frac{1}{2}$ inches	2.25	2.70	3.15	3.75				
2 inches	2.45	2.90	3.47	4.11	5.00			
$2\frac{1}{2}$ inches	2.65	3.22	3.79	4.47	5.50	7.90		
3 inches	2.85	3.48	4.11	4.83	6.00	8.60	12.50	
$3\frac{1}{2}$ inches	3.05	3.74	4.43	5.19	6.50	9.30	13.50	18.20
4 inches	3.25	4.00	4.75	5.55	7.00	10.00	14.50	19.50
$4\frac{1}{2}$ inches	3.45	4.28	5.07	5.91	7.50	10.70	15.50	20.80
5 inches	3.65	4.52	5.39	6.27	8.00	11.40	16.50	22.10
$5\frac{1}{2}$ inches	3.85	4.78	5.71	6.63	8.50	12.10	17.50	23.40
6 inches	4.05	5.04	6.03	6.99	9.00	12.80	18.50	24.70
$6\frac{1}{2}$ inches			6.35	7.35	9.50	13.50	19.50	26.00
7 inches			6.67	7.71	10.00	14.20	20.50	27.30
$7\frac{1}{2}$ inches			6.99	8.07	10.50	14.90	21.50	28.60
8 inches			7.31	8.43	11.00	15.60	22.50	29.90
9 inches			7.95	9.15	12.00	17.00	24.50	32.50
10 inches				9.87	13.00	18.40	26.50	35.10
11 inches				10.59	14.00	19.80	28.50	37.70
12 inches				11.31	15.00	21.20	30.50	40.90

The following extras are to be understood as a part of the Coach and Lag Screw List:

Hexagon Heads, 10% extra.

Skein Screws are sold at the same price as Lag Screws.

WROUGHT IRON TURNBUCKLES.

DIAMETER OF STUB ENDS.	INSIDE OPENING OF BUCKLE.	OUTSIDE LENGTH OF BUCKLE.	TOTAL LENGTH OF BUCKLE WITH STUB ENDS IN	PRICE.
$\frac{3}{8}$ inch	$4\frac{3}{4}$ inches	$6\frac{1}{2}$ inches	17 inches	.40 each
$\frac{1}{2}$ inch	$4\frac{3}{4}$ inches	$6\frac{1}{2}$ inches	17 inches	.42 each
$\frac{5}{8}$ inch	6 inches	8 inches	21 inches	.45 each
$\frac{3}{4}$ inch	6 inches	$8\frac{1}{4}$ inches	23 inches	.50 each
$\frac{7}{8}$ inch	6 inches	$8\frac{1}{2}$ inches	23 inches	.63 each
1 inch	6 inches	9 inches	23 inches	.75 each
$1\frac{1}{8}$ inches	6 inches	9 inches	23 inches	.88 each
$1\frac{1}{4}$ inches	6 inches	$9\frac{1}{4}$ inches	23 inches	1.00 each
$1\frac{3}{8}$ inches	6 inches	$9\frac{1}{2}$ inches	23 inches	1.25 each
$1\frac{1}{2}$ inches	6 inches	$9\frac{3}{4}$ inches	23 inches	1.38 each
$1\frac{3}{4}$ inches	$6\frac{1}{4}$ inches	$10\frac{1}{2}$ inches	25 inches	1.50 each
$1\frac{7}{8}$ inches	$6\frac{1}{4}$ inches	$11\frac{1}{2}$ inches	26 inches	2.00 each

MANUFACTURERS' STANDARD LIST OF CARRIAGE BOLTS.

PRICE PER HUNDRED.

LENGTH.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{1}{2}$ & $\frac{5}{8}$	$\frac{3}{4}$
1 $\frac{1}{2}$ inches	1.00	1.20					
1 $\frac{3}{4}$ inches	1.04	1.25					
2 inches	1.08	1.30	1.50	2.20			
2 $\frac{1}{4}$ inches	1.12	1.35	1.57	2.28			
2 $\frac{1}{2}$ inches	1.16	1.40	1.64	2.36			
2 $\frac{3}{4}$ inches	1.20	1.45	1.71	2.44			
3 inches	1.24	1.50	1.78	2.52	3.00	5.00	7.20
3 $\frac{1}{4}$ inches	1.28	1.55	1.85	2.60	3.10	5.15	7.40
3 $\frac{1}{2}$ inches	1.32	1.60	1.92	2.68	3.20	5.30	7.60
3 $\frac{3}{4}$ inches	1.36	1.65	1.99	2.76	3.30	5.45	7.80
4 inches	1.40	1.70	2.06	2.84	3.40	5.60	8.00
4 $\frac{1}{4}$ inches	1.44	1.75	2.13	2.92	3.50	5.75	8.20
4 $\frac{1}{2}$ inches	1.48	1.80	2.20	3.00	3.60	5.90	8.40
4 $\frac{3}{4}$ inches	1.52	1.85	2.27	3.08	3.70	6.05	8.60
5 inches	1.56	1.90	2.34	3.16	3.80	6.20	8.80
5 $\frac{1}{2}$ inches	1.64	2.00	2.48	3.32	4.00	6.50	9.20
6 inches	1.72	2.10	2.62	3.48	4.20	6.80	9.60
6 $\frac{1}{2}$ inches	1.80	2.20	2.76	3.64	4.40	7.10	10.00
7 inches	1.88	2.30	2.90	3.80	4.60	7.40	10.40
7 $\frac{1}{2}$ inches	1.96	2.40	3.04	3.96	4.80	7.70	10.80
8 inches	2.04	2.50	3.18	4.12	5.00	8.00	11.20
8 $\frac{1}{2}$ inches	2.12	2.60	3.32	4.28	5.20	8.30	11.60
9 inches	2.20	2.70	3.46	4.44	5.40	8.60	12.00
9 $\frac{1}{2}$ inches	2.28	2.80	3.60	4.60	5.60	8.90	12.40
10 inches	2.36	2.90	3.74	4.76	5.80	9.20	12.80
11 inches	2.52	3.10	4.02	5.08	6.20	9.80	13.60
12 inches	2.68	3.30	4.30	5.40	6.60	10.40	14.40
13 inches	2.84	3.50	4.58	5.72	7.00	11.00	15.20
14 inches	3.00	3.70	4.86	6.04	7.40	11.60	16.00
15 inches	3.16	3.90	5.14	6.36	7.80	12.20	16.80
16 inches	3.32	4.10	5.42	6.68	8.20	12.80	17.60
17 inches	3.48	4.30	5.70	7.00	8.60	13.40	18.40
18 inches	3.64	4.50	5.98	7.32	9.00	14.00	19.20
19 inches	3.80	4.70	6.26	7.64	9.40	14.60	20.00
20 inches	3.96	4.90	6.54	7.96	9.80	15.20	20.80

TIRE BOLTS.—Price Per One Hundred.

PHILADELPHIA.							BAY STATE.				
SIZE.	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	SIZE.	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
1 inch	1.50	1.50	1.50				1 inch	.60	.95	1.40	2.20
1 $\frac{1}{4}$ inches	1.50	1.50	1.55	1.90			1 $\frac{1}{4}$ inches	.60	.95	1.40	2.20
1 $\frac{1}{2}$ inches	1.50	1.50	1.65	2.00	2.70		1 $\frac{1}{2}$ inches	.60	.95	1.40	2.20
1 $\frac{3}{4}$ inches	1.50	1.50	1.75	2.15	2.85		1 $\frac{3}{4}$ inches	.65	1.00	1.40	2.20
2 inches	1.50	1.60	1.85	2.25	3.05	5.00	2 inches	.70	1.05	1.47	2.20
2 $\frac{1}{4}$ inches	1.50	1.65	1.95	2.40	3.20	5.20	2 $\frac{1}{4}$ inches	.75	1.10	1.54	2.30
2 $\frac{1}{2}$ inches		1.75	2.05	2.50	3.35	5.40	2 $\frac{1}{2}$ inches	.80	1.15	1.61	2.40
2 $\frac{3}{4}$ inches		1.80	2.15	2.65	3.50	5.60	2 $\frac{3}{4}$ inches	.85	1.20	1.68	2.50
3 inches		1.90	2.25	2.75	3.65	5.80	3 inches	.90	1.25	1.75	2.60
3 $\frac{1}{4}$ inches		2.00		2.90	3.80	6.00	3 $\frac{1}{4}$ inches	.95	1.30	1.82	2.70
3 $\frac{1}{2}$ inches		2.05		3.00	3.95	6.20	3 $\frac{1}{2}$ inches	1.00	1.35	1.89	2.80
3 $\frac{3}{4}$ inches				3.15	4.10	6.40	3 $\frac{3}{4}$ inches	1.05	1.40	1.96	2.90
4 inches				3.25	4.25	6.60	4 inches	1.10	1.45	2.03	3.00
4 $\frac{1}{4}$ inches					4.40	6.80	4 $\frac{1}{4}$ inches	1.15	1.50	2.10	3.10
4 $\frac{1}{2}$ inches					4.55	7.00	4 $\frac{1}{2}$ inches	1.20	1.55	2.17	3.20
4 $\frac{3}{4}$ inches					4.70	7.20	4 $\frac{3}{4}$ inches	1.25	1.60	2.24	3.30
5 inches					4.90	7.40	5 inches	1.30	1.65	2.31	3.40
5 $\frac{1}{4}$ inches						7.60	5 $\frac{1}{4}$ inches	1.35	1.70	2.38	3.50
5 $\frac{1}{2}$ inches						7.80	5 $\frac{1}{2}$ inches	1.40	1.75	2.45	3.60
5 $\frac{3}{4}$ inches						8.00	5 $\frac{3}{4}$ inches	1.45	1.80	2.52	3.70
6 inches						8.20	6 inches	1.50	1.85	2.59	3.80

Sleigh Shoe Bolts same List as Philadelphia Tire.

ROUND HEAD STOVE BOLTS.

PRICE PER 100.

LENGTH.	$\frac{3}{8}$ & $\frac{1}{2}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ & 1 Inch.	$1\frac{1}{4}$ Inch.	$1\frac{1}{2}$ Inch.
$\frac{3}{8}$ inch.....	.85	.85	1.00	1.55	2.65
$\frac{1}{2}$ inch.....	.85	.85	1.00	1.60	2.70
$\frac{5}{8}$ inch.....	.85	.85	1.00	1.65	2.75
$\frac{3}{4}$ inch.....	.90	.90	1.05	1.70	2.80
1 inch.....	.90	.90	1.10	1.75	2.85
$1\frac{1}{8}$ inches.....	.95	.95	1.15	1.80	2.90
$1\frac{1}{4}$ inches.....	1.00	1.00	1.15	1.85	2.95
$1\frac{3}{8}$ inches.....	1.00	1.00	1.20	1.95	3.05
$1\frac{1}{2}$ inches.....	1.05	1.05	1.25	2.05	3.20
$1\frac{3}{4}$ inches.....	1.10	1.10	1.30	2.15	3.35
2 inches.....	1.15	1.15	1.35	2.25	3.50
$2\frac{1}{4}$ inches.....	1.20	1.20	1.40	2.35	3.65
$2\frac{1}{2}$ inches.....	1.25	1.25	1.45	2.45	3.80
$2\frac{3}{4}$ inches.....	1.30	1.30	1.50	2.55	3.95
3 inches.....	1.35	1.35	1.55	2.65	4.10
$3\frac{1}{4}$ inches.....	1.40	1.40	1.60	2.75	4.25
$3\frac{1}{2}$ inches.....	1.45	1.45	1.65	2.85	4.40
$3\frac{3}{4}$ inches.....	1.50	1.50	1.70	2.95	4.55
4 inches.....	1.55	1.55	1.75	3.05	4.70
$4\frac{1}{4}$ inches.....	1.60	1.60	1.80	3.15	4.85
$4\frac{1}{2}$ inches.....	1.65	1.65	1.85	3.25	5.00
$4\frac{3}{4}$ inches.....	1.70	1.70	1.90	3.35	5.15
5 inches.....	1.75	1.75	1.95	3.45	5.30
$5\frac{1}{4}$ inches.....	1.80	1.80	2.00	3.55	5.45
$5\frac{1}{2}$ inches.....	1.85	1.85	2.05	3.65	5.60
$5\frac{3}{4}$ inches.....	1.90	1.90	2.10	3.75	5.75
6 inches.....	1.95	1.95	2.15	3.85	5.90
$6\frac{1}{4}$ inches.....	2.00	2.00			
$6\frac{1}{2}$ inches.....					

Nickel Plating, \$1.00 extra per 100, added to List Price.

FLAT HEAD STOVE BOLTS.

PRICE PER 100.

LENGTH.	$\frac{1}{8}$ & $\frac{1}{4}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ & $\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.
$\frac{3}{8}$ inch.....	.75	.75	.75	.90	1.30	2.50
$\frac{1}{2}$ inch.....	.75	.75	.75	.90	1.35	2.55
$\frac{5}{8}$ inch.....	.75	.75	.80	.95	1.40	2.60
$\frac{3}{4}$ inch.....	.80	.80	.80	.95	1.45	2.65
1 inch.....	.85	.85	.85	1.00	1.50	2.70
$1\frac{1}{8}$ inches.....	.85	.85	.90	1.05	1.60	2.80
$1\frac{1}{4}$ inches.....	.90	.90	.90	1.05	1.70	2.90
$1\frac{3}{8}$ inches.....	.90	.90	.95	1.10	1.80	3.00
$1\frac{1}{2}$ inches.....	.95	.95	1.00	1.15	1.90	3.10
$1\frac{3}{4}$ inches.....	1.00	1.00	1.05	1.20	2.00	3.20
2 inches.....	1.05	1.05	1.10	1.25	2.10	3.30
$2\frac{1}{4}$ inches.....	1.10	1.10	1.15	1.30	2.20	3.40
$2\frac{1}{2}$ inches.....	1.15	1.15	1.20	1.35	2.30	3.50
$2\frac{3}{4}$ inches.....	1.20	1.20	1.25	1.40	2.40	3.60
3 inches.....	1.25	1.25	1.30	1.45	2.50	3.70
$3\frac{1}{4}$ inches.....	1.30	1.30	1.35	1.50	2.60	3.80
$3\frac{1}{2}$ inches.....	1.35	1.35	1.40	1.55	2.70	3.90
$3\frac{3}{4}$ inches.....	1.40	1.40	1.45	1.60	2.80	4.05
4 inches.....	1.45	1.45	1.50	1.65	2.90	4.20
$4\frac{1}{4}$ inches.....	1.50	1.50	1.55	1.70	3.00	4.35
$4\frac{1}{2}$ inches.....	1.55	1.55	1.60	1.75	3.10	4.50
$4\frac{3}{4}$ inches.....	1.60	1.60	1.65	1.80	3.20	4.65
5 inches.....	1.65	1.65	1.70	1.85	3.30	4.80
$5\frac{1}{4}$ inches.....	1.70	1.70	1.75	1.90	3.40	4.95
$5\frac{1}{2}$ inches.....	1.75	1.75	1.80	1.95	3.50	5.10
$5\frac{3}{4}$ inches.....	1.80	1.80	1.85	2.00	3.60	5.25
6 inches.....	1.85	1.85	1.90	2.05	3.70	5.40
$6\frac{1}{4}$ inches.....	1.90	1.90				
$6\frac{1}{2}$ inches.....						

Nickel Plating, \$1.00 extra per 100, added to List Price.

BOILER PATCH BOLTS.

PRICE PER 100—FINISHED AND THREADED.

DIAMETER.....		$\frac{1}{2}$ In.	$\frac{5}{8}$ In.	$\frac{3}{4}$ In.	$\frac{7}{8}$ In.	1 In.
Length from largest diameter of bevel to point.	$\frac{3}{4}$ inch.....	3.75	4.25	6.00	9.50	13.50
	$\frac{7}{8}$ inch.....	4.00	4.50	6.00	9.50	13.50
	1 inch.....	4.25	4.80	6.50	9.50	13.50
	$1\frac{1}{8}$ inches.....	.....	5.10	6.80	9.85	14.00
	$1\frac{1}{4}$ inches.....	.....	5.50	7.25	10.25	14.75
Threads to inch		14	12	12	12	12

BLANKS.

DIAMETER.....	$\frac{1}{2}$ In.	$\frac{5}{8}$ In.	$\frac{3}{4}$ In.	$\frac{7}{8}$ In.	1 In.
Price per pound, in lots of 25 pounds or over.....	.25	.20	.19	.18	.17

IRON SET SCREWS.

PRICE PER 100.

DIAMETER	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
Length under Head. { $\frac{3}{4}$	2.00	2.20	2.50	2.90	3.40	4.25	5.00					
1	2.15	2.35	2.65	3.10	3.60	4.25	5.00	7.00				
$1\frac{1}{4}$	2.30	2.50	2.80	3.30	3.80	4.50	5.25	7.00	11.30			
$1\frac{1}{2}$	2.45	2.65	2.95	3.50	4.00	4.75	5.50	7.50	11.30	14.90		
$1\frac{3}{4}$	2.60	2.80	3.10	3.70	4.20	5.00	5.75	8.00	12.00	15.90	19.50	
2	2.80	3.00	3.30	3.95	4.45	5.30	6.05	8.60	12.90	17.00	21.10	25.30
$2\frac{1}{4}$		3.25	3.55	4.25	4.75	5.65	6.40	9.30	13.80	18.40	22.90	27.40
$2\frac{1}{2}$			3.85	4.60	5.10	6.05	6.80	10.00	14.80	19.80	24.70	29.60
$2\frac{3}{4}$				5.00	5.50	6.50	7.25	10.80	15.90	21.40	26.70	32.00
3					5.95	7.00	7.80	11.70	17.10	23.00	28.80	34.60
Threads to inch. .	20	18	16	14	13	12	11	10	9	8	7	7
Add for each $\frac{1}{4}$ in. .	.25	.30	.35	.45	.50	.55	.60	1.00	1.30	1.70	2.20	2.80

STEEL SET SCREWS.

PRICE PER 100.

DIAMETER	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
Length under Head to Extreme Point. { $\frac{3}{4}$	2.50	2.75	3.10	3.60	4.25	5.30	6.25					
1	2.65	2.90	3.30	3.90	4.50	5.30	6.25	8.75				
$1\frac{1}{4}$	2.85	3.10	3.50	4.15	4.75	5.60	6.55	8.75	14.10			
$1\frac{1}{2}$	3.05	3.30	3.70	4.40	5.00	5.90	6.90	9.35	14.10	18.60		
$1\frac{3}{4}$	3.25	3.50	3.90	4.65	5.25	6.25	7.25	10.00	15.00	19.80	24.40	
2	3.50	3.75	4.15	4.95	5.55	6.60	7.60	10.75	16.10	21.25	26.35	31.60
$2\frac{1}{4}$	3.80	4.05	4.45	5.30	5.90	7.05	8.00	11.60	17.25	23.00	28.60	34.25
$2\frac{1}{2}$	4.10	4.45	4.80	5.75	6.35	7.55	8.50	12.50	18.50	24.70	30.85	37.00
$2\frac{3}{4}$	4.45	4.80	5.25	6.20	6.85	8.10	9.05	13.50	19.85	26.65	33.40	40.00
3	4.75	5.20	5.70	6.75	7.45	8.75	9.70	14.60	21.35	28.75	36.00	43.25
Threads to inch. .	20	18	16	14	13	12	11	10	9	8	7	7
Add for each $\frac{1}{4}$ in. .	.35	.40	.50	.60	.70	.80	.90	1.30	1.75	2.30	3.00	3.75

SQUARE HEAD CAP SCREW.—Price Per One Hundred.

Diameter of Head.	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$
Length of Head.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$
Diameter of Screw.	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$
Length Under Head to Extreme Point.	$\frac{3}{4}$...	2.40	2.75	3.20	3.80	4.40	5.75							
	1...	2.60	2.95	3.40	4.00	4.70	5.75	7.70						
	$1\frac{1}{4}$...	2.75	3.10	3.65	4.20	4.95	6.05	7.70	10.50					
	$1\frac{1}{2}$...	2.90	3.30	3.85	4.45	5.25	6.35	8.25	10.50	14.00				
	$1\frac{3}{4}$...	3.05	3.50	4.10	4.70	5.55	6.65	8.80	11.10	14.80	18.00			
	2...	3.25	3.70	4.35	4.95	5.90	7.05	9.40	11.80	15.70	19.00	22.50		
	$2\frac{1}{4}$...	3.50	4.00	4.65	5.25	6.30	7.55	10.10	12.60	16.70	20.20	24.00	30.00	
	$2\frac{1}{2}$...	3.75	4.35	5.00	5.60	6.75	8.15	10.90	13.50	17.80	21.50	25.80	32.00	39.00
	$2\frac{3}{4}$...	4.00	4.70	5.45	6.00	7.25	8.85	11.80	14.60	19.10	23.10	27.90	34.20	41.50
	3...	4.25	5.05	5.90	6.55	7.80	9.65	12.80	15.90	20.60	25.00	30.50	37.00	45.00
	$3\frac{1}{4}$...		5.40	6.35	7.10	8.45	10.55	14.00	17.40	22.40	27.30	33.50	40.50	49.00
	$3\frac{1}{2}$...			6.80	7.65	9.10	11.45	15.20	18.90	24.20	29.60	36.50	44.00	53.00
	$3\frac{3}{4}$...				8.20	9.75	12.35	16.40	20.40	26.00	31.90	39.50	47.50	57.00
	4...					10.40	13.25	17.60	21.90	27.80	34.20	42.50	51.00	61.00
	$4\frac{1}{4}$...						14.15	18.80	23.40	29.60	36.50	45.50	54.50	65.00
	$4\frac{1}{2}$...							20.00	24.90	31.40	38.80	48.50	58.00	69.00
	$4\frac{3}{4}$...								26.40	33.20	41.10	51.50	61.50	73.00
	5...									35.00	43.40	54.50	65.00	77.00
Threads to Inch.	20	18	16	14	12	12	11	10	9	8	7	7	7	6
Add for Each $\frac{1}{4}$ Inch.	.25	.35	.45	.55	.65	.90	1.20	1.50	1.80	2.30	3.00	3.50	4.00	

HEXAGON HEAD CAP SCREW.—Price Per One Hundred.

Diam. of Head....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
Length of Head..	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
Diam. of Screw..	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
Length Under Head to Extreme Point.	$\frac{3}{4}$...	3.00	3.25	3.75	4.40	5.50	7.00					
	1...	3.25	3.50	4.00	4.70	5.70	7.00	9.50				
	$1\frac{1}{4}$...	3.50	3.75	4.25	5.00	6.00	7.50	9.50	12.20			
	$1\frac{1}{2}$...	3.75	4.00	4.50	5.30	6.30	8.00	10.00	12.20	16.00		
	$1\frac{3}{4}$...	4.00	4.25	4.75	5.60	6.60	8.50	10.60	12.80	16.60	21.20	
	2...	4.25	4.60	5.05	5.95	7.00	9.10	11.20	13.40	17.20	22.30	29.00
	$2\frac{1}{4}$...	4.55	5.00	5.40	6.35	7.50	9.70	11.90	14.10	17.90	23.60	30.50
	$2\frac{1}{2}$...	4.85	5.40	5.80	6.80	8.00	10.40	12.70	14.90	18.80	25.10	32.30
	$2\frac{3}{4}$...	5.15	5.80	6.30	7.30	8.60	11.20	13.60	15.90	20.00	26.90	34.40
	3...	5.45	6.20	6.80	7.90	9.30	12.10	14.70	17.00	21.80	29.00	37.00
	$3\frac{1}{4}$...		6.60	7.30	8.50	10.10	13.10	16.00	18.60	23.80	31.40	40.00
	$3\frac{1}{2}$...			7.80	9.10	10.90	14.10	17.30	20.20	25.80	33.80	43.00
	$3\frac{3}{4}$...				9.70	11.70	15.10	18.60	21.80	27.80	36.20	46.00
	4...					12.50	16.10	19.90	23.40	29.80	38.60	49.00
	$4\frac{1}{4}$...						17.10	21.20	25.00	31.80	41.00	52.00
	$4\frac{1}{2}$...							22.50	26.60	33.80	43.40	55.00
	$4\frac{3}{4}$...								28.20	35.80	45.80	58.00
	5...									37.80	48.20	61.00
Threads to Inch..	20	18	16	14	12	12	11	10	9	8	7	7
Add for each $\frac{1}{4}$ In.	.30	.40	.50	.60	.80	1.00	1.30	1.60	2.00	2.40	3.00	4.00

ROUND AND FLAT HEAD BRIGHT AND BLUED SCREWS.

List January 1, 1900.

Per Gross.

$\frac{1}{4}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.
No. 0..... .63 1..... .63 2..... .63 3..... .63 4..... .63	No. 0..... .63 1..... .63 2..... .63 3..... .63 4..... .63 5..... .63 6..... .64 7..... .71 8..... .80 9..... .84	No. 1..... .63 2..... .63 3..... .63 4..... .63 5..... .64 6..... .66 7..... .76 8..... .80 9..... .84 10..... .87 11..... .92 12..... 1.00	No. 1..... .63 2..... .63 3..... .63 4..... .63 5..... .67 6..... .72 7..... .78 8..... .85 9..... .88 10..... .91 11..... .95 12..... 1.00 13..... 1.05 14..... 1.15	No. 2..... .63 3..... .64 4..... .65 5..... .70 6..... .77 7..... .82 8..... .88 9..... .92 10..... .97 11..... 1.05 12..... 1.10 13..... 1.15 14..... 1.25 15..... 1.40 16..... 1.65	No. 2..... .65 3..... .67 4..... .70 5..... .75 6..... .82 7..... .87 8..... .92 9..... .95 10..... 1.05 11..... 1.10 12..... 1.15 13..... 1.25 14..... 1.35 15..... 1.60 16..... 1.85	No. 3..... .73 4..... .76 5..... .80 6..... .87 7..... .93 8..... .98 9..... 1.05 10..... 1.15 11..... 1.20 12..... 1.25 13..... 1.40 14..... 1.60 15..... 1.85 16..... 2.10 17..... 2.30 18..... 2.65 20..... 3.15
$1\frac{1}{4}$ Inch.	$1\frac{1}{2}$ Inch.	$1\frac{3}{4}$ inch.	2 Inch.	$2\frac{1}{4}$ Inch.	$2\frac{1}{2}$ Inch.	$2\frac{3}{4}$ Inch.
No. 3..... .80 4..... .83 5..... .91 6..... .98 7..... 1.05 8..... 1.10 9..... 1.15 10..... 1.20 11..... 1.30 12..... 1.40 13..... 1.55 14..... 1.75 15..... 2.00 16..... 2.30 17..... 2.55 18..... 2.80 20..... 3.35 22..... 4.00 24..... 4.75	No. 3..... .90 4..... .95 5..... 1.00 6..... 1.05 7..... 1.10 8..... 1.20 9..... 1.25 10..... 1.30 11..... 1.40 12..... 1.55 13..... 1.70 14..... 1.90 15..... 2.20 16..... 2.45 17..... 2.75 18..... 3.15 20..... 3.50 22..... 4.20 24..... 4.95	No. 5..... 1.20 6..... 1.25 7..... 1.33 8..... 1.40 9..... 1.45 10..... 1.50 11..... 1.60 12..... 1.70 13..... 1.85 14..... 2.05 15..... 2.35 16..... 2.65 17..... 3.00 18..... 3.40 20..... 4.00 22..... 4.70 24..... 5.25	No. 5..... 1.30 6..... 1.35 7..... 1.40 8..... 1.50 9..... 1.55 10..... 1.60 11..... 1.70 12..... 1.80 13..... 2.05 14..... 2.35 15..... 2.65 16..... 2.95 17..... 3.30 18..... 3.85 20..... 4.40 22..... 4.80 24..... 5.50	No. 5..... 1.45 6..... 1.50 7..... 1.55 8..... 1.60 9..... 1.65 10..... 1.75 11..... 1.85 12..... 2.00 13..... 2.20 14..... 2.45 15..... 2.85 16..... 3.25 17..... 3.55 18..... 4.10 20..... 4.85 22..... 5.25 24..... 5.75	No. 5..... 1.75 6..... 1.80 7..... 1.85 8..... 1.90 9..... 2.00 10..... 2.10 11..... 2.15 12..... 2.25 13..... 2.40 14..... 2.60 15..... 3.05 16..... 3.40 17..... 3.75 18..... 4.35 20..... 5.20 22..... 5.85 24..... 6.50	No. 6..... 2.20 7..... 2.25 8..... 2.30 9..... 2.35 10..... 2.40 11..... 2.45 12..... 2.55 13..... 2.65 14..... 2.85 15..... 3.25 16..... 3.65 17..... 4.05 18..... 4.75 20..... 5.70 22..... 6.80 24..... 7.40
3 Inch.	$3\frac{1}{2}$ Inch.	4 Inch.	$4\frac{1}{2}$ Inch.	5 Inch.	6 Inch.	
No. 8..... 2.70 9..... 2.75 10..... 2.80 11..... 2.85 12..... 2.90 13..... 3.00 14..... 3.15 15..... 3.40 16..... 3.85 17..... 4.40 18..... 5.10 20..... 6.15 22..... 6.85 24..... 7.70 26..... 9.40	No. 10..... 3.70 11..... 3.80 12..... 3.95 13..... 4.05 14..... 4.15 15..... 4.35 16..... 4.60 17..... 4.95 18..... 5.75 20..... 6.80 22..... 7.60 24..... 8.75 26..... 10.60	No. 12..... 4.80 13..... 4.90 14..... 5.00 15..... 5.20 16..... 5.35 17..... 6.05 18..... 6.75 20..... 7.85 22..... 8.75 24..... 10.05 26..... 12.10 28..... 14.10 30..... 16.25	No. 14..... 6.35 15..... 6.65 16..... 6.90 17..... 7.25 18..... 7.85 20..... 8.70 22..... 10.15 24..... 11.65 26..... 13.80 28..... 15.95 30..... 18.10	No. 15..... 8.00 16..... 8.40 17..... 8.80 18..... 9.40 20..... 10.10 22..... 11.70 24..... 13.25 26..... 15.75 28..... 17.80 30..... 20.00	No. 15..... 9.90 16..... 10.60 17..... 11.25 18..... 12.65 20..... 13.80 22..... 15.00 24..... 16.20 26..... 20.00 28..... 22.55 30..... 25.15	

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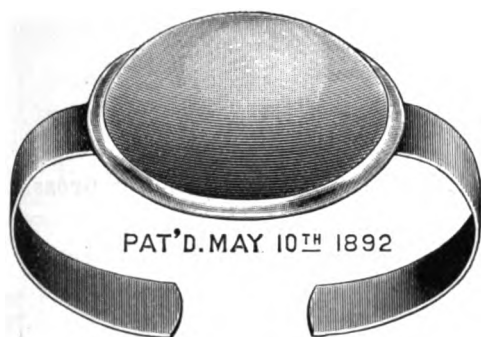
BRANCH HOUSES: St. Louis, Mo., Baltimore, Md.

ROUND AND FLAT HEAD BRASS SCREWS.

PRICE PER GROSS.

$\frac{1}{4}$ Inch.		$\frac{3}{8}$ Inch.		$\frac{1}{2}$ Inch.		$\frac{5}{8}$ Inch.		$\frac{3}{4}$ Inch.	
No.		No.		No.		No.		No.	
0	80	0	80	1	88	2	91	2	1.08
1	80	1	82	2	89	3	99	3	1.10
2	84	2	86	3	93	4	1.08	4	1.15
3	87	3	89	4	1.03	5	1.20	5	1.30
4	91	4	95	5	1.10	6	1.30	6	1.45
		5	1.03	6	1.20	7	1.50	7	1.60
		6	1.10	7	1.30	8	1.70	8	1.90
		7	1.20	8	1.50	9	1.90	9	2.15
				9	1.70	10	2.15	10	2.40
				10	1.80	11	2.40	11	2.65
						12	2.65	12	3.00
$\frac{3}{8}$ Inch.		1 Inch.		$1\frac{1}{4}$ Inch.		$1\frac{1}{2}$ Inch.		$1\frac{3}{4}$ Inch.	
No.		No.		No.		No.		No.	
2	1.35	3	1.55	3	2.05	4	2.85	6	3.75
3	1.40	4	1.60	4	2.10	5	2.90	7	3.80
4	1.45	5	1.65	5	2.15	6	2.95	8	3.85
5	1.50	6	1.70	6	2.20	7	3.00	9	3.90
6	1.55	7	1.75	7	2.25	8	3.05	10	4.45
7	1.60	8	1.80	8	2.30	9	3.45	11	5.00
8	2.05	9	2.60	9	3.00	10	3.95	12	5.60
9	2.35	10	2.95	10	3.25	11	4.45	13	6.25
10	2.65	11	3.30	11	3.85	12	5.00	14	6.90
11	2.95	12	3.65	12	4.35	13	5.60	15	7.60
12	3.35	13	4.10	13	4.85	14	6.25	16	8.35
13	3.70	14	4.55	14	5.35	15	6.90	17	9.15
14	4.10	15	5.00	15	5.95	16	7.60	18	9.85
15	4.55	16	5.55	16	6.55	17	8.35	19	10.85
16	5.05	17	6.65	17	7.20	18	9.15	20	11.85
				18	7.85	19	10.85		
				20	9.35				
2 Inch.		$2\frac{1}{4}$ Inch.		$2\frac{1}{2}$ Inch.		3 Inch.			
No.		No.		No.		No.			
6	4.80	8	.85	10	9.50	10	13.70		
7	4.85	9	.90	11	9.55	11	13.75		
8	4.90	10	6.95	12	9.60	12	13.80		
9	4.95	11	7.00	13	9.65	13	13.85		
10	5.00	12	7.05	14	9.70	14	13.90		
11	5.05	13	7.90	15	10.75	15	13.95		
12	6.40	14	8.80	16	11.85	16	14.00		
13	7.15	15	9.80	17	13.00	17	16.80		
14	7.95	16	10.75	18	14.30	18	19.95		
15	8.80	17	11.90	19	16.95	20	23.40		
16	9.75	18	13.00	22	19.85	24	27.10		
17	10.70	20	15.40	24	23.00	26	31.15		
18	11.70	22	18.05						

The following varieties of Screws are invoiced from this List at varying Discounts: Flat, Round, Fillister and Oval Head Screws, of Brass, Copper, Bronze or Phosphor Bronze, Bronzed or Lacquered.



SAMPLES SENT FREE.

ACME RED-LIGHT FUSEES.

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Wind, Rain and Snow-Proof.

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and Fairbank's Scales.



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RICHMOND, VIRGINIA.



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Bronze Liquids

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Easily applied and washable.

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UNTARNISHABLE AND WEATHERPROOF.

In self-opening cans from pints to gallons.
Can be applied by any one.

SEND FOR PRICES AND SAMPLES.

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New York.

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175 Randolph St.,
Chicago, Ill.

PATENT IRON WOOD SCREWS.

Patented May 30, 1876.

FLAT, ROUND AND OVAL HEAD.

Price Per Gross.

$\frac{1}{8}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.
No. 0..... .63 1..... .63 2..... .63 3..... .63 4..... .63	No. 0..... .63 1..... .63 2..... .63 3..... .68 4..... .68 5..... .68 6..... .64 7..... .71 8..... .80 9..... .84	No. 1..... .63 2..... .63 3..... .63 4..... .63 5..... .64 6..... .66 7..... .76 8..... .80 9..... .84 10..... .87 11..... .92 12..... 1.00	No. 1..... .63 2..... .63 3..... .63 4..... .63 5..... .67 6..... .72 7..... .78 8..... .85 9..... .88 10..... .91 11..... .95 12..... 1.00 13..... 1.05 14..... 1.15	No. 2..... .63 3..... .64 4..... .65 5..... .70 6..... .77 7..... .82 8..... .88 9..... .92 10..... .97 11..... 1.05 12..... 1.10 13..... 1.15 14..... 1.25 15..... 1.40 16..... 1.65	No. 2..... .65 3..... .67 4..... .70 5..... .75 6..... .82 7..... .87 8..... .92 9..... .95 10..... 1.05 11..... 1.10 12..... 1.15 13..... 1.25 14..... 1.35 15..... 1.60 16..... 1.85	No. 3..... .73 4..... .76 5..... .80 6..... .87 7..... .93 8..... .98 9..... 1.05 10..... 1.15 11..... 1.20 12..... 1.25 13..... 1.40 14..... 1.60 15..... 1.85 16..... 2.10 17..... 2.30 18..... 2.65 20..... 3.15
	$1\frac{1}{8}$ Inch.	$1\frac{1}{4}$ Inch.	2 Inch.	$2\frac{1}{4}$ Inch.	$2\frac{1}{2}$ Inch.	$2\frac{3}{4}$ Inch.
No. 3..... .80 4..... .88 5..... .91 6..... .98 7..... 1.05 8..... 1.10 9..... 1.15 10..... 1.20 11..... 1.30 12..... 1.40 13..... 1.55 14..... 1.75 15..... 2.00 16..... 2.30 17..... 2.55 18..... 2.80 20..... 3.35 22..... 4.00 24..... 4.75	No. 3..... .90 4..... .95 5..... 1.00 6..... 1.05 7..... 1.10 8..... 1.20 9..... 1.25 10..... 1.30 11..... 1.40 12..... 1.55 13..... 1.70 14..... 1.90 15..... 2.20 16..... 2.45 17..... 2.75 18..... 3.15 20..... 3.50 22..... 4.20 24..... 4.95	No. 5..... 1.20 6..... 1.25 7..... 1.33 8..... 1.40 9..... 1.45 10..... 1.50 11..... 1.60 12..... 1.70 13..... 1.85 14..... 2.05 15..... 2.35 16..... 2.65 17..... 3.00 18..... 3.40 20..... 4.00 22..... 4.70 24..... 5.25	No. 5..... 1.30 6..... 1.35 7..... 1.40 8..... 1.50 9..... 1.55 10..... 1.60 11..... 1.70 12..... 1.80 13..... 2.05 14..... 2.35 15..... 2.65 16..... 2.95 17..... 3.30 18..... 3.85 20..... 4.40 22..... 4.80 24..... 5.50	No. 5..... 1.45 6..... 1.50 7..... 1.55 8..... 1.60 9..... 1.65 10..... 1.75 11..... 1.85 12..... 2.00 13..... 2.20 14..... 2.45 15..... 2.85 16..... 3.25 17..... 3.55 18..... 4.10 20..... 4.85 22..... 5.25 24..... 5.75	No. 5..... 1.75 6..... 1.80 7..... 1.85 8..... 1.90 9..... 2.00 10..... 2.10 11..... 2.15 12..... 2.25 13..... 2.40 14..... 2.60 15..... 3.05 16..... 3.40 17..... 3.75 18..... 4.35 20..... 5.20 22..... 5.85 24..... 6.50	No. 6..... 2.20 7..... 2.25 8..... 2.30 9..... 2.35 10..... 2.40 11..... 2.45 12..... 2.55 13..... 2.65 14..... 2.85 15..... 3.25 16..... 3.65 17..... 4.05 18..... 4.75 20..... 5.70 22..... 6.60 24..... 7.40
$3\frac{1}{8}$ Inch.	$3\frac{1}{4}$ Inch.	4 Inch.	$4\frac{1}{2}$ Inch.	5 Inch.	6 Inch.	
No. 6..... 2.60 7..... 2.65 8..... 2.70 9..... 2.75 10..... 2.80 11..... 2.85 12..... 2.90 13..... 3.00 14..... 3.15 15..... 3.40 16..... 3.85 17..... 4.40 18..... 5.10 20..... 6.15 22..... 6.85 24..... 7.70 26..... 9.40	No. 8..... 3.50 9..... 3.60 10..... 3.70 11..... 3.80 12..... 3.95 13..... 4.05 14..... 4.15 15..... 4.35 16..... 4.60 17..... 4.95 18..... 5.75 20..... 6.80 22..... 7.60 24..... 8.75 26..... 10.60	No. 8..... 4.40 9..... 4.50 10..... 4.60 11..... 4.70 12..... 4.80 13..... 4.90 14..... 5.00 15..... 5.20 16..... 5.35 17..... 6.05 18..... 6.75 20..... 7.85 22..... 8.75 24..... 10.05 26..... 12.10 28..... 14.10 30..... 16.25	No. 12..... 6.10 13..... 6.20 14..... 6.35 15..... 6.65 16..... 6.90 17..... 7.25 18..... 7.85 20..... 8.70 22..... 10.15 24..... 11.65 26..... 13.80 28..... 15.95 30..... 18.10	No. 12..... 7.10 13..... 7.30 14..... 7.60 15..... 8.00 16..... 8.40 17..... 8.80 18..... 9.40 20..... 10.10 22..... 11.70 24..... 13.25 26..... 15.75 28..... 17.80 30..... 20.00	No. 12..... 8.70 13..... 9.00 14..... 9.30 15..... 9.90 16..... 10.60 17..... 11.25 18..... 12.65 20..... 13.80 22..... 15.00 24..... 16.20 26..... 20.00 28..... 22.55 30..... 25.15	*The number of Gross in a Bundle is indicated by small figures on the side, divided by a star (*).

The following varieties of Iron Screws are invoiced from this List at varying Discounts: Flat, Round, Piano, Fillister and Oval Head Screws, Dowel and Felloe Screws, Bright, Blued, Brassed, Bronzed, Japanned, Lacquered and Tinned, also Drive Screws.

PATENT BRASS WOOD SCREWS.

Patented May 30, 1876.

Per Gross.

$\frac{1}{4}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.
No.	No.	No.	No.	No.	No.	No.
0..... .80	0..... .80	1..... .86	1..... .91	2..... 1.08	2..... 1.35	3..... 1.55
1..... .80	1..... .82	2..... .89	2..... .91	3..... 1.10	3..... 1.40	4..... 1.60
2..... .84	2..... .86	3..... .93	3..... .99	4..... 1.15	4..... 1.45	5..... 1.65
3..... .87	3..... .89	4..... 1.03	4..... 1.06	5..... 1.30	5..... 1.50	6..... 1.70
4..... .91	4..... .95	5..... 1.10	5..... 1.20	6..... 1.45	6..... 1.55	7..... 1.95
5..... .97	5..... 1.03	6..... 1.20	6..... 1.30	7..... 1.60	7..... 1.80	8..... 2.30
	6..... 1.10	7..... 1.30	7..... 1.50	8..... 1.90	8..... 2.05	9..... 2.60
	7..... 1.20	8..... 1.50	8..... 1.70	9..... 2.15	9..... 2.35	10..... 2.95
	8..... 1.35	9..... 1.70	9..... 1.90	10..... 2.40	10..... 2.65	11..... 3.30
		10..... 1.90	10..... 2.15	11..... 2.65	11..... 2.95	12..... 3.65
			11..... 2.40	12..... 3.00	12..... 3.35	13..... 4.10
			12..... 2.65	13..... 3.35	13..... 3.70	14..... 4.55
			13..... 3.00	14..... 3.70	14..... 4.10	15..... 5.00
			14..... 3.35	15..... 4.10	15..... 4.55	16..... 5.55
			15..... 3.70	16..... 4.50	16..... 5.05	17..... 6.65
			16..... 4.10			
$1\frac{1}{4}$ Inch.	$1\frac{1}{2}$ Inch.	$1\frac{3}{4}$ Inch.	2 Inch.	$2\frac{1}{4}$ Inch.	$2\frac{1}{2}$ Inch.	$2\frac{3}{4}$ Inch.
No.	No.	No.	No.	No.	No.	No.
3..... 2.05	4..... 2.85	6..... 3.75	6..... 4.80	8..... 6.85	9..... 9.40	9..... 11.50
4..... 2.10	5..... 2.90	7..... 3.80	7..... 4.85	9..... 6.90	10..... 9.50	10..... 11.60
5..... 2.15	6..... 2.95	8..... 3.85	8..... 4.90	10..... 6.95	11..... 9.55	11..... 11.65
6..... 2.20	7..... 3.00	9..... 3.90	9..... 4.95	11..... 7.00	12..... 9.60	12..... 11.70
7..... 2.25	8..... 3.05	10..... 4.45	10..... 5.00	12..... 7.05	13..... 9.65	13..... 11.75
8..... 2.65	9..... 3.45	11..... 5.05	11..... 5.65	13..... 7.90	14..... 9.70	14..... 11.80
9..... 3.00	10..... 3.95	12..... 5.70	12..... 6.40	14..... 8.80	15..... 10.75	15..... 11.95
10..... 3.25	11..... 4.45	13..... 6.35	13..... 7.15	15..... 9.80	16..... 11.85	16..... 12.00
11..... 3.85	12..... 5.00	14..... 7.10	14..... 7.95	16..... 10.75	17..... 13.00	17..... 14.20
12..... 4.35	13..... 5.60	15..... 7.90	15..... 8.80	17..... 11.90	18..... 14.80	18..... 15.65
13..... 4.85	14..... 6.25	16..... 8.65	16..... 9.75	18..... 13.00	19..... 16.95	19..... 18.40
14..... 5.35	15..... 6.90	17..... 9.50	17..... 10.70	20..... 15.40	22..... 19.85	22..... 21.60
15..... 5.95	16..... 7.60	18..... 10.45	18..... 11.70	22..... 18.05	24..... 23.00	24..... 25.00
16..... 6.55	17..... 8.35	20..... 12.40	20..... 13.90	24..... 20.95		
17..... 7.20	18..... 9.15	22..... 14.50	22..... 16.80			
18..... 7.85	20..... 10.85	24..... 16.85	24..... 18.90			
20..... 9.35	22..... 12.65					
3 Inch.	$3\frac{1}{2}$ Inch.	4 Inch.	$4\frac{1}{2}$ Inch.	5 Inch.	6 Inch.	
No.	No.	No.	No.	No.	No.	
10..... 13.70	10..... 15.85	12..... 18.40	14..... 22.40	16..... 25.60	16..... 28.20	
11..... 13.75	11..... 15.90	13..... 18.60	15..... 22.60	17..... 26.90	17..... 31.00	
12..... 13.80	12..... 15.95	14..... 18.80	16..... 22.80	18..... 29.60	18..... 34.05	
13..... 13.85	13..... 16.00	15..... 19.00	17..... 23.40	20..... 35.50	20..... 40.80	
14..... 13.90	14..... 16.05	16..... 19.20	18..... 25.75	22..... 40.70	22..... 46.80	
15..... 13.95	15..... 16.10	17..... 20.35	20..... 30.90	24..... 47.60	24..... 54.75	
16..... 14.00	16..... 16.20	18..... 22.30	22..... 35.40	26..... 53.80	26..... 61.90	
17..... 15.40	17..... 17.70	20..... 26.90	24..... 41.40	28..... 62.60	28..... 72.95	
18..... 16.80	18..... 19.40	22..... 30.80	26..... 46.80	30..... 72.15	30..... 82.95	
20..... 19.95	20..... 22.75	24..... 36.00	28..... 54.40			
22..... 23.40	22..... 26.90	26..... 40.70				
24..... 27.10	24..... 31.20	28..... 47.35				
26..... 31.15	26..... 35.80	30..... 54.56				
28..... 35.85	28..... 41.20					
30..... 41.18	30..... 47.45					

The number of Gross in a Bundle is indicated by small figures on the side, divided by a star ().

The following varieties of Screws are invoiced from this List at varying Discounts: Flat, Round, Fillister and Oval Head Screws, of Brass, Copper, Bronze or Phosphor Bronze. Bronzed or Lacquered.

Round and Flat Head.

Silver and Nickel Plated Iron Wood Screws.

Price Per Gross

$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.	$1\frac{1}{4}$ Inch.	$1\frac{1}{2}$ Inch.
No.	No.	No.	No.	No.	No.	No.
4..... 1.45	4..... 1.45	4..... 1.45	6..... 1.45	6..... 1.50	6..... 1.55	7..... 1.88
5..... 1.45	5..... 1.45	5..... 1.45	7..... 1.50	7..... 1.55	7..... 1.55	8..... 1.94
6..... 1.45	6..... 1.45	6..... 1.45	8..... 1.55	8..... 1.55	8..... 1.65	9..... 2.05
7..... 1.45	7..... 1.45	7..... 1.45	9..... 1.61	9..... 1.68	9..... 1.80	10..... 2.15
8..... 1.45	8..... 1.45	8..... 1.50	10..... 1.70	10..... 1.75	10..... 1.95	11..... 2.38
9..... 1.50	9..... 1.55	9..... 1.57	11..... 1.90	11..... 1.95	11..... 2.10	12..... 2.50
10..... 1.60	10..... 1.63	10..... 1.70	12..... 2.20	12..... 2.25	12..... 2.30	13..... 2.85
	11..... 1.85	11..... 1.90	13..... 2.40	13..... 2.45	13..... 2.60	14..... 3.15
	12..... 2.05	12..... 2.15	14..... 2.75	14..... 2.80	14..... 2.95	15..... 3.55
		13..... 2.35	15..... 3.15	15..... 3.25	15..... 3.35	16..... 4.00
		14..... 2.70	16..... 3.60	16..... 3.70	16..... 3.85	17..... 4.40
					17..... 4.20	18..... 4.80
					18..... 4.65	20..... 5.85

$1\frac{3}{4}$ Inch.	2 Inch.	$2\frac{1}{4}$ Inch.	$2\frac{1}{2}$ Inch.	$2\frac{3}{4}$ Inch.	3 Inch.
No.	No.	No.	No.	No.	No.
7..... 2.15	9..... 2.40	10..... 2.85	10..... 3.45	14..... 4.60	14..... 5.00
8..... 2.20	10..... 2.50	11..... 3.00	11..... 3.55	16..... 5.40	16..... 6.20
9..... 2.30	11..... 2.70	12..... 3.25	12..... 3.65	18..... 7.30	17..... 8.05
10..... 2.40	12..... 3.00	13..... 3.75	13..... 4.00	20..... 8.75	20..... 9.45
11..... 2.55	13..... 3.45	14..... 4.00	14..... 4.25		
12..... 2.80	14..... 3.75	15..... 4.30	15..... 4.75		
13..... 3.12	15..... 4.05	16..... 4.80	16..... 5.10		
14..... 3.45	16..... 4.45	17..... 5.30	17..... 5.85		
15..... 3.80	17..... 5.00	18..... 6.10	18..... 6.65		
16..... 4.20	18..... 5.55	20..... 7.25	20..... 7.90		
17..... 4.60	20..... 6.70				
18..... 5.10					
20..... 6.15					

Round and Flat Head.

Silver and Nickel Plated Brass Wood Screws.

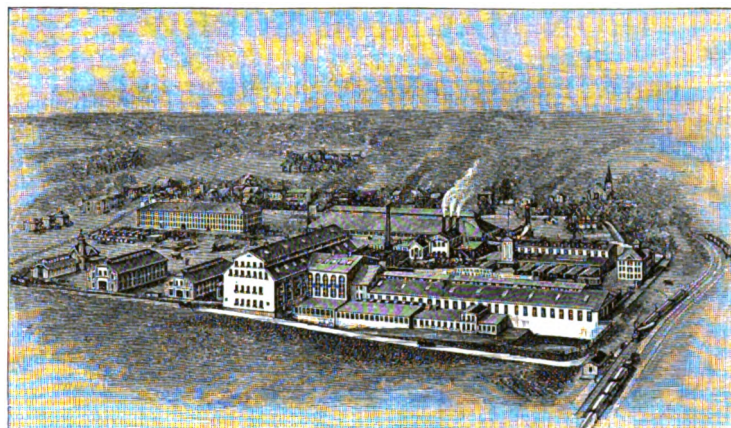
Price Per Gross.

$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.	$1\frac{1}{4}$ Inch.	$1\frac{1}{2}$ Inch.
No.	No.	No.	No.	No.	No.	No.
4..... 1.65	4..... 1.70	4..... 1.75	6..... 2.10	6..... 2.20	6..... 2.60	7..... 3.25
5..... 1.70	5..... 1.75	5..... 1.85	7..... 2.30	7..... 2.40	7..... 2.70	8..... 3.35
6..... 1.80	6..... 1.90	6..... 2.00	8..... 2.55	8..... 2.70	8..... 3.00	9..... 3.70
7..... 1.90	7..... 2.00	7..... 2.10	9..... 2.75	9..... 2.95	9..... 3.30	10..... 4.20
8..... 2.05	8..... 2.15	8..... 2.35	10..... 3.10	10..... 3.35	10..... 3.75	11..... 4.80
9..... 2.15	9..... 2.40	9..... 2.55	11..... 3.55	11..... 3.80	11..... 4.30	12..... 5.45
10..... 2.45	10..... 2.70	10..... 2.90	12..... 4.05	12..... 4.30	12..... 4.85	13..... 6.10
	11..... 3.05	11..... 3.30	13..... 4.50	13..... 4.80	13..... 5.45	14..... 6.95
	12..... 3.50	12..... 3.75	14..... 5.15	14..... 5.40	14..... 6.20	15..... 7.80
		13..... 4.20	15..... 5.85	15..... 6.20	15..... 7.00	16..... 8.80
		14..... 4.85	16..... 6.60	16..... 7.00	16..... 7.85	17..... 9.70
					17..... 8.70	18..... 10.60
					18..... 9.50	20..... 12.65

$1\frac{3}{4}$ Inch.	2 Inch.	$2\frac{1}{4}$ Inch.	$2\frac{1}{2}$ Inch.	$2\frac{3}{4}$ Inch.	3 Inch.
No.	No.	No.	No.	No.	No.
7..... 3.85	9..... 4.95	10..... 6.85	10..... 9.00	14..... 11.70	14..... 13.45
8..... 3.95	10..... 5.10	11..... 7.00	11..... 9.20	15..... 12.40	15..... 13.80
9..... 4.05	11..... 5.80	12..... 7.20	12..... 9.35	16..... 13.25	16..... 14.15
10..... 4.65	12..... 6.60	13..... 8.05	13..... 9.55	17..... 14.60	17..... 15.60
11..... 5.30	13..... 7.40	14..... 9.15	14..... 9.85	18..... 16.00	18..... 17.05
12..... 6.00	14..... 8.40	15..... 10.25	15..... 11.05	20..... 19.00	20..... 20.30
13..... 6.75	15..... 9.45	16..... 11.45	16..... 12.30		
14..... 7.65	16..... 10.55	17..... 12.65	17..... 13.60		
15..... 8.65	17..... 11.65	18..... 13.85	18..... 14.90		
16..... 9.65	18..... 12.75	20..... 16.45	20..... 17.75		
17..... 10.65	20..... 15.20				
18..... 11.70					
20..... 13.90					

ROBERT POOLE & SON CO.,

Engineers, Founders and Machinists,



GEARING
OF ALL
KINDS.

HEAVY
MACHINERY

BALTIMORE, MARYLAND.

 Catalogues on Application.

Estimates Cheerfully Given. 

TAYLOR



Best Yorkshire

**STAY-BOLT
IRON.**

Taylor Iron Piston Rods
and Axles

Used by the
Leading Railroads.

R. MUSHET'S "Special" and "Titanic" STEELS.

THESE GOODS ARE THE STANDARDS OF EXCELLENCE.

Sole Representatives in the United States,

B. M. JONES & CO.

81 Milk Street, BOSTON. 143 Liberty Street, NEW YORK.

IRON MACHINE SCREWS.

FLAT, ROUND AND FILLISTER HEAD.

PER GROSS.

$\frac{1}{8}$ Inch.	$\frac{1}{4}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	$\frac{3}{4}$ Inch.	1 Inch.	1 $\frac{1}{4}$ Inch.	1 $\frac{1}{2}$ Inch.	2 Inch.
No.	No.	No.	No.	No.	No.	No.	No.	No.
2.....25	2.....25	2.....27	2.....29	2.....27	2.....27	2.....29	2.....29	2.....33
3.....25	3.....25	3.....27	3.....29	3.....27	3.....27	3.....29	3.....29	3.....33
4.....25	4.....25	4.....27	4.....29	4.....27	4.....27	4.....29	4.....29	4.....33
5.....29	5.....29	5.....31	5.....33	5.....31	5.....31	5.....33	5.....33	5.....36
6.....29	6.....29	6.....31	6.....33	6.....31	6.....31	6.....33	6.....33	6.....36
	7.....35	7.....38	7.....41	7.....38	7.....38	7.....41	7.....41	7.....46
	8.....35	8.....38	8.....41	8.....38	8.....38	8.....41	8.....41	8.....46
	9.....43	9.....46	9.....49	9.....46	9.....46	9.....49	9.....49	9.....54
	10.....43	10.....46	10.....49	10.....46	10.....46	10.....49	10.....49	10.....54
			12.....59	12.....59	12.....59	12.....59	12.....59	12.....66
			14.....74	14.....74	14.....74	14.....74	14.....74	14.....81
			16.....95	16.....95	16.....95	16.....95	16.....95	16.....1.00
						18.....1.10	18.....1.10	18.....1.15
						20.....1.25	20.....1.25	20.....1.35
						22.....1.45	22.....1.45	22.....1.65
						24.....1.70	24.....1.70	24.....1.90
$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.	1 $\frac{1}{8}$ Inch.	1 $\frac{1}{4}$ Inch.	1 $\frac{3}{8}$ Inch.	1 $\frac{1}{2}$ Inch.	2 Inch.
No.	No.	No.	No.	No.	No.	No.	No.	No.
3.....33	4.....37	5.....48	6.....55	7.....85	8.....85	9.....1.05	10.....1.05	11.....1.35
4.....33	5.....42	6.....48	7.....70	8.....85	9.....85	10.....1.05	11.....1.05	12.....1.35
5.....36	6.....42	7.....60	8.....70	9.....85	10.....85	11.....1.05	12.....1.05	13.....1.60
6.....36	7.....52	8.....60	9.....70	10.....85	11.....85	12.....1.05	13.....1.05	14.....1.80
7.....46	8.....52	9.....72	10.....85	11.....85	12.....85	13.....1.05	14.....1.05	15.....2.00
8.....46	9.....63	10.....72	11.....85	12.....85	13.....85	14.....1.05	15.....1.05	16.....2.20
9.....54	10.....63	11.....85	12.....85	13.....85	14.....85	15.....1.05	16.....1.05	17.....2.50
10.....54	11.....74	12.....85	13.....85	14.....85	15.....85	16.....1.05	17.....1.05	18.....3.00
12.....66	14.....88	16.....1.20	17.....85	18.....85	19.....85	20.....1.25	21.....1.25	22.....3.00
14.....81	16.....1.10	18.....1.40	19.....85	20.....85	21.....85	22.....1.25	23.....1.25	24.....3.00
16.....1.00	18.....1.30	20.....1.65	21.....85	22.....85	23.....85	24.....1.25	25.....1.25	26.....3.00
18.....1.15	20.....1.55	22.....1.90	23.....85	24.....85	25.....85	26.....1.25	27.....1.25	28.....3.00
20.....1.35	22.....1.75	24.....2.20	25.....85	26.....85	27.....85	28.....1.25	29.....1.25	30.....3.00
22.....1.65	24.....2.00	26.....2.70	27.....85	28.....85	29.....85	30.....1.25	31.....1.25	32.....3.00
24.....1.90	26.....2.45	28.....3.80	28.....3.10	29.....85	30.....85	31.....1.25	32.....1.25	33.....3.00
			28.....3.75	30.....85	31.....85	32.....1.25	33.....1.25	34.....3.00
			30.....4.50	31.....85	32.....85	33.....1.25	34.....1.25	35.....3.00
1 $\frac{1}{2}$ Inch.	1 $\frac{3}{4}$ Inch.	2 Inch.	2 $\frac{1}{4}$ Inch.	2 $\frac{1}{2}$ Inch.	2 $\frac{3}{4}$ Inch.	3 Inch.	3 $\frac{1}{2}$ Inch.	4 Inch.
No.	No.	No.	No.	No.	No.	No.	No.	No.
10.....1.35	12.....1.80	14.....2.30	16.....3.10	18.....3.65	20.....4.15	22.....4.90	24.....5.75	26.....6.70
12.....1.60	14.....2.05	16.....2.75	18.....3.25	20.....4.15	22.....4.90	24.....5.75	26.....6.70	28.....7.75
14.....1.80	16.....2.40	18.....2.90	20.....3.70	22.....4.90	24.....5.75	26.....6.70	28.....7.75	30.....8.90
16.....2.00	18.....2.55	20.....3.35	22.....4.35	24.....5.75	26.....6.70	28.....7.75	30.....8.90	31.....9.85
18.....2.20	20.....2.90	22.....3.95	24.....5.00	26.....6.70	28.....7.75	30.....8.90	31.....9.85	
20.....2.50	22.....3.45	24.....4.65	26.....5.85	28.....7.75	30.....8.90	31.....9.85		
22.....3.00	24.....4.10	26.....5.45	28.....6.90	30.....8.90	31.....9.85			
24.....3.60	26.....4.85	28.....6.35	30.....8.00					
26.....4.30	28.....5.70	30.....7.25						
28.....5.10	30.....6.65							
30.....6.00								

THREADS PER INCH.

No.	56	48	32, 36, 40	30, 32	24, 30, 32	20, 24	16, 18, 20	16, 18	14, 16
	2	3	4, 5	6, 7, 8	9, 10	12, 14	16	18, 20, 22	24, 26, 28, 30

On Machine Screws differing from regular standards, special prices will be given on application.

BRASS MACHINE SCREWS.

FLAT, ROUND AND FILLISTER HEAD.

PER GROSS.

$\frac{1}{8}$ Inch.	$\frac{1}{4}$ Inch.	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.
No.	No.	No.	No.	No.	No.	No.
2.....32	2.....32	2.....35	2.....39	2.....41	2.....44	2.....47
3.....32	3.....32	3.....35	3.....39	3.....41	3.....44	3.....47
4.....32	4.....32	4.....35	4.....39	4.....41	4.....44	4.....47
5.....40	5.....40	5.....43	5.....48	5.....50	5.....53	5.....57
6.....40	6.....40	6.....43	6.....48	6.....50	6.....53	6.....57
	7.....58	7.....62	7.....68	7.....70	7.....73	7.....77
	8.....58	8.....62	8.....68	8.....70	8.....73	8.....77
	9.....88	9.....88	9.....95	9.....97	9.....100	9.....105
	10.....88	10.....88	10.....95	10.....97	10.....100	10.....105
			12.....1.00	12.....1.05	12.....1.08	12.....1.10
			14.....1.55	14.....1.60	14.....1.63	14.....1.66
			16.....2.00	16.....2.05	16.....2.08	16.....2.11
$\frac{5}{8}$ Inch.	$\frac{3}{4}$ Inch.	$\frac{7}{8}$ Inch.	1 Inch.	1 $\frac{1}{8}$ Inch.	1 $\frac{1}{4}$ Inch.	1 $\frac{3}{8}$ Inch.
No.	No.	No.	No.	No.	No.	No.
8.....48	4.....60	5.....80	6.....90	7.....1.00	8.....1.10	9.....1.20
4.....48	5.....70	6.....80	7.....1.05	8.....1.15	9.....1.25	10.....1.30
5.....57	6.....70	7.....1.05	8.....1.05	9.....1.15	10.....1.25	11.....1.35
6.....57	7.....90	8.....1.05	9.....1.05	10.....1.15	11.....1.25	12.....1.35
7.....77	8.....90	9.....1.15	10.....1.15	11.....1.25	12.....1.35	13.....1.45
8.....77	9.....1.15	10.....1.15	11.....1.25	12.....1.35	13.....1.45	14.....1.55
9.....1.05	10.....1.15	11.....1.25	12.....1.35	13.....1.45	14.....1.55	15.....1.65
10.....1.05	12.....1.50	14.....2.30	16.....2.10	18.....2.90	20.....3.75	22.....4.60
12.....1.30	14.....2.10	16.....2.90	18.....2.60	20.....3.40	22.....4.20	24.....5.00
14.....1.90	16.....2.60	18.....3.40	20.....3.10	22.....3.90	24.....4.70	26.....5.50
16.....2.85	18.....3.50	20.....4.30	22.....4.00	24.....4.80	26.....5.60	28.....6.40
18.....3.25	20.....4.30	22.....5.15	24.....4.80	26.....5.60	28.....6.40	30.....7.20
20.....3.90	22.....5.40	24.....7.40	26.....5.20	28.....6.00	30.....6.80	32.....7.60
22.....4.90	24.....6.70	26.....9.00	28.....6.70	30.....7.50	32.....8.30	34.....9.10
24.....6.30	26.....8.10	28.....11.25	30.....8.50	32.....9.30	34.....10.10	36.....10.90
			28.....10.60	30.....11.40	32.....12.20	34.....13.00
			28.....13.00	30.....13.80	32.....14.60	34.....15.40
			30.....15.75	32.....16.50	34.....17.30	36.....18.10
1 $\frac{1}{2}$ Inch.	1 $\frac{3}{4}$ Inch.	2 Inch.	2 $\frac{1}{4}$ Inch.	2 $\frac{1}{2}$ Inch.	2 $\frac{3}{4}$ Inch.	3 Inch.
No.	No.	No.	No.	No.	No.	No.
10.....2.50	12.....3.50	14.....4.90	16.....6.65	18.....9.00	20.....12.00	22.....16.00
12.....3.00	14.....4.15	16.....5.75	18.....7.50	20.....10.50	22.....14.00	24.....19.00
14.....3.60	16.....5.00	18.....6.50	20.....9.25	22.....12.50	24.....17.00	26.....24.10
16.....4.30	18.....5.50	20.....8.25	22.....11.80	24.....15.50	26.....21.80	28.....29.70
18.....5.00	20.....7.50	22.....10.80	24.....14.95	26.....19.80	28.....27.50	30.....38.00
20.....6.80	22.....9.85	24.....13.55	26.....18.70	28.....25.35	30.....32.00	
22.....8.90	24.....12.70	26.....17.10	28.....23.05	30.....30.50		
24.....11.55	26.....16.05	28.....21.80	30.....28.00			
26.....14.70	28.....20.40	30.....26.00				
28.....18.25	30.....24.25					
30.....22.50						

THREADS PER INCH.

	<u>56</u>	<u>48</u>	<u>32, 36, 40</u>	<u>30, 32</u>	<u>24, 30, 32</u>	<u>20, 24</u>	<u>16, 18, 20</u>	<u>16, 18</u>	<u>14, 16</u>
No.	2	3	4, 5	6, 7, 8	9, 10	12, 14	16	18, 20 22	24, 26, 28, 30

On Machine Screws differing from regular standards, special prices will be given on application.

WOOD HAND SCREWS.

NUMBER.	Diameter of Screws.	Length of Screws.	Length of Jaws.	Size of Jaws.	Open.	Price per Dozen.
0	1¼ inch.	28 inch.	21 inch.	3 x3 in.	17 inch.	12 00
1	1¼ inch.	26 inch.	20 inch.	2¾ x3¼ in.	14½ inch.	10.50
2	1¼ inch.	24 inch.	20 inch.	2¾ x3 in.	13 inch.	9.50
3	1¼ inch.	22 inch.	20 inch.	2½ x2¾ in.	11 inch.	9.00
4	1½ inch.	22 inch.	18 inch.	2½ x2½ in.	12½ inch.	8.50
5	1½ inch.	20 inch.	18 inch.	2½ x2½ in.	10½ inch.	8.00
6	1 inch.	20 inch.	16 inch.	2¾ x2½ in.	10¾ inch.	7.50
7	1 inch.	18 inch.	16 inch.	2¾ x2¾ in.	9 inch.	7.00
8	¾ inch.	20 inch.	14 inch.	2 x2¼ in.	11¾ inch.	6.50
9	¾ inch.	18 inch.	14 inch.	2 x2 in.	10 inch.	6.00
10	¾ inch.	16 inch.	14 inch.	2 x1¾ in.	8 inch.	5.50
11	¾ inch.	14 inch.	12 inch.	1½ x1¾ in.	6¾ inch.	5.00
12	¾ inch.	12 inch.	10 inch.	1½ x1¾ in.	5¼ inch.	4.25
13	½ inch.	10 inch.	8½ inch.	1¾ x1¾ in.	4¼ inch.	3.50
14	½ inch.	9 inch.	7 inch.	1½ x1½ in.	4 inch.	2.75
15	¾ inch.	5 inch.	4 inch.	¾ x ¾ in.	2¼ inch.	2.25
15½	¾ inch.	Thumb Screws.	4 inch.	¾ x ¾ in.	2¼ inch.	2.00

Either screw or jaw, one-quarter the price of the complete hand screw.

COLD-PUNCHED, CHAMFERED, TRIMMED AND REAMED
SQUARE NUTS.

UNITED STATES STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.	
				Blank.	Tapped.
$\frac{1}{4}$	$\frac{1}{4}$	$1\frac{1}{4}$	$\frac{1}{4}$	20.0	22.0
$\frac{3}{8}$	$\frac{5}{16}$	$\frac{1}{2}$	$\frac{5}{16}$	18.0	19.5
$1\frac{1}{8}$	$\frac{3}{8}$	$1\frac{1}{8}$	$\frac{3}{8}$	14.5	15.6
$1\frac{1}{4}$	$\frac{7}{16}$	$1\frac{1}{4}$	$\frac{7}{16}$	14.0	14.9
$\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{2}$	11.3	12.0
$1\frac{1}{2}$	$\frac{5}{8}$	$2\frac{1}{8}$	$\frac{5}{8}$	11.3	11.9
$1\frac{3}{4}$	$\frac{3}{4}$	$2\frac{3}{4}$	$\frac{3}{4}$	10.0	10.5
$1\frac{7}{8}$	$\frac{7}{8}$	$3\frac{1}{8}$	$\frac{7}{8}$	9.4	9.8
$1\frac{15}{16}$	1	$3\frac{1}{2}$	1	9.4	9.8
2	$1\frac{1}{8}$	$4\frac{1}{8}$	$1\frac{1}{8}$	9.4	9.8
$2\frac{1}{8}$	$1\frac{1}{4}$	$4\frac{1}{4}$	$1\frac{1}{4}$	10.1	10.5
$2\frac{1}{4}$	$1\frac{3}{8}$	$4\frac{3}{8}$	$1\frac{3}{8}$	10.3	10.8
$2\frac{3}{8}$	$1\frac{1}{2}$	$4\frac{1}{2}$	$1\frac{1}{2}$	10.7	11.3
$2\frac{1}{2}$	$1\frac{5}{8}$	$4\frac{5}{8}$	$1\frac{5}{8}$	11.1	11.8
$2\frac{7}{8}$	$1\frac{3}{4}$	$4\frac{3}{4}$	$1\frac{3}{4}$	11.5	12.2
3	$1\frac{7}{8}$	$5\frac{1}{8}$	$1\frac{7}{8}$	12.0	12.8
$3\frac{1}{8}$	2	$5\frac{1}{4}$	2	12.0	12.9
$3\frac{1}{4}$	$2\frac{1}{8}$	$5\frac{3}{8}$	$2\frac{1}{8}$	12.5	13.6
$3\frac{3}{8}$	$2\frac{1}{4}$	$5\frac{1}{2}$	$2\frac{1}{4}$	13.5	14.8
$4\frac{1}{8}$	$2\frac{3}{8}$	$6\frac{1}{8}$	$2\frac{3}{8}$	14.0	15.4
$4\frac{1}{4}$	3	$6\frac{1}{4}$	3	14.5	16.0

COLD-PUNCHED, CHAMFERED, TRIMMED AND REAMED
HEXAGON NUTS.

UNITED STATES STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.	
				Blank.	Tapped.
$\frac{1}{4}$	$\frac{1}{4}$	$1\frac{1}{4}$	$\frac{1}{4}$	27.0	28.5
$\frac{3}{8}$	$\frac{5}{16}$	$\frac{1}{2}$	$\frac{5}{16}$	24.0	26.0
$1\frac{1}{8}$	$\frac{3}{8}$	$1\frac{1}{8}$	$\frac{3}{8}$	18.5	20.1
$1\frac{1}{4}$	$\frac{7}{16}$	$1\frac{1}{4}$	$\frac{7}{16}$	18.0	19.3
$\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{2}$	14.0	15.0
$1\frac{1}{2}$	$\frac{5}{8}$	$2\frac{1}{8}$	$\frac{5}{8}$	14.0	14.9
$1\frac{3}{4}$	$\frac{3}{4}$	$2\frac{3}{4}$	$\frac{3}{4}$	12.5	13.2
$1\frac{7}{8}$	$\frac{7}{8}$	$3\frac{1}{8}$	$\frac{7}{8}$	10.9	11.5
$1\frac{15}{16}$	1	$3\frac{1}{2}$	1	10.9	11.5
2	$1\frac{1}{8}$	$4\frac{1}{8}$	$1\frac{1}{8}$	10.9	11.5
$2\frac{1}{8}$	$1\frac{1}{4}$	$4\frac{1}{4}$	$1\frac{1}{4}$	11.5	12.1
$2\frac{1}{4}$	$1\frac{3}{8}$	$4\frac{3}{8}$	$1\frac{3}{8}$	12.0	12.7
$2\frac{3}{8}$	$1\frac{1}{2}$	$4\frac{1}{2}$	$1\frac{1}{2}$	12.6	13.4
$2\frac{1}{2}$	$1\frac{5}{8}$	$4\frac{5}{8}$	$1\frac{5}{8}$	13.2	14.1
$2\frac{7}{8}$	$1\frac{3}{4}$	$5\frac{1}{8}$	$1\frac{3}{4}$	14.0	14.9
3	$1\frac{7}{8}$	$5\frac{1}{4}$	$1\frac{7}{8}$	14.5	15.5
$3\frac{1}{8}$	2	$5\frac{1}{2}$	2	14.5	15.6
$3\frac{1}{4}$	$2\frac{1}{8}$	$5\frac{3}{8}$	$2\frac{1}{8}$	15.0	16.3
$3\frac{3}{8}$	$2\frac{1}{4}$	$5\frac{1}{2}$	$2\frac{1}{4}$	16.0	17.5
$4\frac{1}{8}$	$2\frac{3}{8}$	$6\frac{1}{8}$	$2\frac{3}{8}$	16.5	18.1
$4\frac{1}{4}$	3	$6\frac{1}{4}$	3	17.0	18.7

COLD PUNCHED PLAIN SQUARE NUTS.

UNITED STATES STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.	
				Blank.	Tapped.
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	13.8	15.8
$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{2}$	12.8	14.3
$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	11.0	12.1
$\frac{5}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	10.5	11.4
$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	9.8	10.0
$\frac{7}{8}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{7}{8}$	9.3	9.9
$1\frac{1}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{8}$	8.9	9.4
$1\frac{1}{4}$	$1\frac{1}{2}$	1	$1\frac{1}{4}$	8.6	9.0
$1\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{3}{4}$	8.6	9.0
$1\frac{5}{8}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{5}{8}$	8.4	8.8
$1\frac{7}{8}$	$1\frac{7}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	8.4	8.8
2	2	$1\frac{7}{8}$	2	8.8	9.2
$2\frac{1}{8}$	$2\frac{1}{8}$	2	$2\frac{1}{8}$	8.8	9.3
$2\frac{3}{8}$	$2\frac{3}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	9.6	10.2
$2\frac{5}{8}$	$2\frac{5}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	9.6	10.3
$2\frac{7}{8}$	$2\frac{7}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	10.2	10.9
3	3	$2\frac{7}{8}$	3	10.2	11.0
$3\frac{1}{8}$	$3\frac{1}{8}$	3	$3\frac{1}{8}$	10.6	11.5
$3\frac{3}{8}$	$3\frac{3}{8}$	$3\frac{1}{8}$	$3\frac{3}{8}$	11.0	12.0
$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{3}{8}$	$3\frac{5}{8}$	11.5	12.6

COLD PUNCHED PLAIN HEXAGON NUTS.

UNITED STATES STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.	
				Blank.	Tapped.
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	21.0	23.5
$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{2}$	19.0	21.0
$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	14.7	16.3
$\frac{5}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	13.7	15.0
$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	11.5	12.5
$\frac{7}{8}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{7}{8}$	11.5	12.4
$1\frac{1}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{8}$	10.7	11.4
$1\frac{1}{4}$	$1\frac{1}{2}$	1	$1\frac{1}{4}$	10.2	10.8
$1\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{3}{4}$	10.2	10.8
$1\frac{5}{8}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{5}{8}$	10.0	10.6
$1\frac{7}{8}$	$1\frac{7}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	10.0	10.6
2	2	$1\frac{7}{8}$	2	10.5	11.1
$2\frac{1}{8}$	$2\frac{1}{8}$	2	$2\frac{1}{8}$	10.5	11.2
$2\frac{3}{8}$	$2\frac{3}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	11.3	12.1
$2\frac{5}{8}$	$2\frac{5}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	11.3	12.2
$2\frac{7}{8}$	$2\frac{7}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	12.1	13.0
3	3	$2\frac{7}{8}$	3	12.1	13.1
$3\frac{1}{8}$	$3\frac{1}{8}$	3	$3\frac{1}{8}$	12.6	13.7
$3\frac{3}{8}$	$3\frac{3}{8}$	$3\frac{1}{8}$	$3\frac{3}{8}$	13.0	14.2
$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{3}{8}$	$3\frac{5}{8}$	13.5	14.8

Port Chester Bolt and Nut Company

~ PORT CHESTER, N. Y. ~

MANUFACTURERS OF

Cold Punched, Chamfered and Trimmed,
— Case-Hardened and Semi-Finished

NUTS

FINELY FINISHED NUTS A SPECIALTY.

CLAY DREWRY, President.

JNO. C. FREEMAN, V.-Pres. and Treas.

W. A. WILLIAMS, Secretary.

Drewry-Hughes Company,

IMPORTERS OF

DRY GOODS AND NOTIONS

Nos. 1012 and 1014 East Cary Street,

RICHMOND, VIRGINIA.



BAKER BRAKE JAW.

This is Jas. H. Baker's latest IMPROVED JAW. It is believed to be SUPERIOR to any now in the market, and is not an infringement on any existing patent.

This jaw is good IRON, $1\frac{1}{4}$ -in. reamed holes; takes in 1-in levers at a greater angle than the common standard, though shorter (and therefore neater) than the common one in the fork. RE-ENFORCED where the sides meet, and in front of the holes.

M. C. B.



Brake Pin.

This cut is from a photo of our latest make. Its size IS $1\frac{3}{4}$ -in., and NOT $1\frac{1}{4}$ -in. Our regular stock have $\frac{7}{8}$ -in. holes, $2\frac{7}{8}$ -in. to center from inside of head. This pin is not a common "one-stroke" rivet, but is a FINISHED article.

We make BRAKE
FORGINGS to order.

JAS. H. BAKER M'FG. CO.

**PITTSBURGH,
PENNSYLVANIA.**

Cold Punched Square Nuts. MANUFACTURERS' STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.			
				PLAIN.		O. T. & D.	
				Blank.	Tapped.	Blank.	Tapped.
1/2	1/4	5/32	1/4	13.8	15.8	20.0	22.0
5/8	5/16	3/8	5/16	12.3	13.8	16.0	17.5
3/4	3/8	1/2	3/8	10.8	11.9	13.5	14.6
7/8	7/16	1/2	7/16	9.3	10.2	11.3	12.2
7/8	1/2	1/2	1/2	9.3	10.0	11.3	12.0
1	1/2	1/2	1/2	9.0	9.7	10.0	10.7
1 1/8	9/16	1/2	9/16	8.8	9.4	9.8	10.4
1 1/8	5/8	1/2	5/8	8.8	9.3	9.8	10.3
1 1/4	5/8	1/2	5/8	8.5	9.0	9.2	9.7
1 3/8	3/4	3/4	3/4	8.5	8.9	9.2	9.6
1 1/2	3/4	3/4	3/4	8.2	8.6	8.8	9.2
1 1/2	7/8	7/8	7/8	8.5	8.9	9.2	9.6
1 3/4	7/8	7/8	7/8	8.2	8.6	8.8	9.2
1 3/4	1	1	1	8.2	8.6	8.8	9.2
2	1	1	1	8.2	8.6	8.8	9.2
2	1 1/8	1 1/8	1 1/8	8.2	8.6	8.8	9.2
2 1/4	1 1/8	1 1/8	1 1/8	8.2	8.6	8.8	9.2
2 1/4	1 1/4	1 1/4	1 1/4	8.6	9.0	9.3	9.7
2 1/2	1 1/4	1 1/4	1 1/4	8.6	9.0	9.3	9.7
2 3/4	1 3/8	1 3/8	1 3/8	8.6	9.1	9.3	9.8
3	1 1/2	1 1/2	1 1/2	9.2	9.8	10.0	10.6
3 1/4	1 5/8	1 5/8	1 5/8	9.4	10.1	10.2	10.9
3 1/2	1 3/4	1 3/4	1 3/4	9.8	10.5	10.6	11.3

Cold Punched Hexagon Nuts. MANUFACTURERS' STANDARD SIZES.

WIDE.	THICK.	HOLE.	BOLT.	PRICE PER POUND.			
				PLAIN.		O. T. & D.	
				Blank.	Tapped.	Blank.	Tapped.
½	¼	⅜	¼	21.0	23.5	27.0	29.5
⅝	⅝	⅝	⅝	17.5	19.5	21.5	23.5
¾	¾	1½	¾	13.8	15.4	17.5	19.1
⅞	⅞	1½	⅞	11.5	12.8	14.0	15.3
⅞	½	1½	½	11.5	12.5	14.0	15.0
1	½	1½	½	11.0	12.0	12.5	13.5
1	⅝	1½	½	11.0	12.0	12.5	13.5
1⅛	⅝	½	⅝	10.6	11.5	12.0	12.9
1⅛	⅝	⅝	⅝	10.6	11.3	12.0	12.7
1¼	⅝	⅝	⅝	10.1	10.8	11.0	11.7
1¼	¾	⅝	¾	10.1	10.8	11.0	11.7
1⅜	¾	1½	¾	10.1	10.7	11.0	11.6
1⅜	⅞	1½	¾	10.1	10.7	11.0	11.6
1⅜	¾	1½	¾	9.7	10.3	10.6	11.2
1½	¾	1½	¾	9.7	10.3	10.6	11.2
1½	⅞	1½	⅞	10.1	10.7	11.0	11.6
1⅝	⅞	1½	⅞	9.7	10.3	10.6	11.2
1⅝	1	1½	⅞	9.7	10.3	10.6	11.2
1¾	1	⅞	1	9.7	10.3	10.6	11.2
1¾	1⅛	⅞	1	9.7	10.3	10.6	11.2
2	1¼	1½	1⅛	9.7	10.3	11.2	11.8
2¼	1⅜	1½	1½	10.1	10.7	11.2	11.8
2½	1½	1½	1½	10.1	10.8	11.5	12.2
2¾	1⅝	1½	1½	10.3	11.1	12.0	12.8

PRICE LIST OF BULK RIVETS.

ANY STYLE OF HEAD.

Cents Per Pound.

Length....	$\frac{1}{2}$ in. and longer	$\frac{1}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{11}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$
Diameter:														
$\frac{1}{8}$	15													
$\frac{3}{8}$	15	16												
$\frac{1}{2}$	15	16	16											
$\frac{3}{4}$	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$								
1	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$								
2	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	17	17							
3	15 $\frac{1}{2}$	16	17	17	17	17	18	18	18					
$\frac{1}{4}$	15 $\frac{1}{2}$	16	17	17	17	17	18	18	18	19	19			
$\frac{3}{8}$	15 $\frac{1}{2}$	17	17	18	18	18	18	18	18	19	19	20		
5	16	17	18	18	18	18	19	20	20	21	21	22	22	23
6	16	17	18	18	19	19	20	20	21	22	23	23	23	24
$\frac{1}{2}$	16	17	18	18	19	19	20	20	21	22	23	24	25	26
$\frac{3}{4}$	16 $\frac{1}{2}$	18	18	18	19	19	20	20	21	22	23	24	25	26
8	17	18	19	19	20	20	21	21	22	23	24	25	26	27
9	18	19	20	20	21	21	23	23	23	24	25	27	29	30
10	19	20	21	22	23	25	27	28	28	30	33	35	37	38
11	20	22	24	26	27	28	30	31	31	33	37	40	42	45
12	21	24	26	28	29	30	32	34	35	36	41	45	50	55
13	25	27	30	33	34	35	37	39	40	41	45	50	55	60
14	27	30	35	38	40	45	50	52	55	58	58	60	63	65

EXTRAS.—Shoulder Rivets, 2c. per pound added to list.

Goods packed in 25-pound boxes, 20c. per 100 pounds net; in 10-pound and 5-pound packages, 30c. per 100 pounds net; in 1-pound packages, 50c. per 100 pounds net.

Any of the above sizes tinned, 2 $\frac{1}{2}$ c. per pound net extra.

PRICE LIST OF TINNERS' RIVETS.

IN BULK.

In Papers of 1000 Each.

PRICE PER POUND.			SIZE.	PRICE PER PAPER.		
Tin-Plated.	Tinned.	Black.		Black.	Tinned.	Tin-Plated.
.42	.48	.38	8 ounce.....	.20	.25	.22
.38	.44	.34	10 ounce.....	.22	.28	.25
.35	.41	.31	12 ounce.....	.24	.31	.27
.33	.39	.29	14 ounce.....	.26	.35	.30
.30	.36	.26	1 pound.....	.27	.37	.31
.27	.33	.23	1 $\frac{1}{4}$ pound.....	.29	.42	.34
.26	.32	.22	1 $\frac{1}{2}$ pound.....	.33	.48	.39
.25	.31	.21	1 $\frac{3}{4}$ pound.....	.37	.55	.44
.24	.30	.20	2 pound.....	.42	.62	.50
.24	.30	.20	2 $\frac{1}{2}$ pound.....	.55	.80	.65
.23	.29	.19	3 pound.....	.60	.90	.72
.23	.29	.19	3 $\frac{1}{2}$ pound.....	.70	1.06	.84
.22	.28	.18	4 pound.....	.76	1.16	.92
.22	.28	.18	5 pound.....	.90	1.40	1.10
.21	.27	.17	6 pound.....	1.08	1.68	1.32
.21	.27	.17	7 pound.....	1.26	1.97	1.54
.21	.27	.17	8 pound.....	1.44	2.24	1.76
.21	.27	.17	9 pound.....	1.53	2.43	1.89
.20	.26	.16	10 pound.....	1.75	2.75	2.15
.20	.26	.15 $\frac{1}{2}$	12 pound.....	1.98	3.18	2.84
.20	.26	.15 $\frac{1}{2}$	14 pound.....	2.31	3.71	2.87
.20	.26	.15 $\frac{1}{2}$	16 pound.....	2.64	4.24	3.28

SPRING PINS OR COTTERS.

STANDARD SIZES.

PER THOUSAND.

$\frac{1}{8}$ in. Wire— No. 11 w. g.	3-16 in. Wire— No. 7 w. g.	$\frac{1}{4}$ in. Wire— No. 4 w. g.	$\frac{3}{8}$ in. Wire.	$\frac{1}{2}$ in. Wire.
$\frac{1}{8} \times \frac{1}{2}$ 4.75	3-16 $\times \frac{3}{4}$ 7.50	$\frac{1}{4} \times 1$ 15.00	$\frac{3}{8} \times 1\frac{1}{8}$ 28.50	$\frac{1}{2} \times 2$ 52.50
$\frac{1}{8} \times \frac{3}{4}$ 5.50	3-16 $\times 1$ 8.80	$\frac{1}{4} \times 1\frac{1}{4}$ 16.50	$\frac{3}{8} \times 1\frac{1}{4}$ 30.75	$\frac{1}{2} \times 2\frac{1}{4}$ 57.75
$\frac{1}{8} \times 1$ 6.25	3-16 $\times 1\frac{1}{4}$ 10.10	$\frac{1}{4} \times 1\frac{1}{2}$ 18.00	$\frac{3}{8} \times 2$ 33.50	$\frac{1}{2} \times 2\frac{1}{2}$ 63.00
$\frac{1}{8} \times 1\frac{1}{4}$ 7.00	3-16 $\times 1\frac{1}{2}$ 11.40	$\frac{1}{4} \times 1\frac{3}{4}$ 20.00	$\frac{3}{8} \times 2\frac{1}{4}$ 36.00	$\frac{1}{2} \times 3$ 73.50
$\frac{1}{8} \times 1\frac{1}{2}$ 7.75	3-16 $\times 1\frac{3}{4}$ 12.70	$\frac{1}{4} \times 2$ 22.00	$\frac{3}{8} \times 2\frac{1}{2}$ 38.75	$\frac{1}{2} \times 3\frac{1}{2}$ 84.00
$\frac{1}{8} \times 1\frac{3}{4}$ 8.50	3-16 $\times 2$ 14.00	$\frac{1}{4} \times 2\frac{1}{4}$ 24.00	$\frac{3}{8} \times 2\frac{3}{4}$ 40.50	$\frac{1}{2} \times 4$ 94.50
$\frac{1}{8} \times 2$ 9.25	3-16 $\times 2\frac{1}{4}$ 15.30	$\frac{1}{4} \times 2\frac{1}{2}$ 26.25	$\frac{3}{8} \times 3$ 43.25	$\frac{1}{2} \times 5$ 115.50
$\frac{1}{8} \times 2\frac{1}{4}$ 10.00	3-16 $\times 2\frac{1}{2}$ 16.80	$\frac{1}{4} \times 2\frac{3}{4}$ 28.00	$\frac{3}{8} \times 3\frac{1}{2}$ 48.75	$\frac{1}{2} \times 6$ 136.00
$\frac{1}{8} \times 2\frac{1}{2}$ 10.75	3-16 $\times 2\frac{3}{4}$ 18.30	$\frac{1}{4} \times 3$ 30.00	$\frac{3}{8} \times 4$ 54.75	
	3-16 $\times 3$ 19.80	$\frac{1}{4} \times 3\frac{1}{2}$ 34.00		$\frac{5}{8}$ in. Wire.
		$\frac{1}{4} \times 4$ 39.00		$\frac{5}{8} \times 3$ 112.50
				$\frac{5}{8} \times 4$ 136.50
				$\frac{5}{8} \times 5$ 160.50
				$\frac{5}{8} \times 6$ 184.50

FLAT SPRING KEYS.

16 and 17 WIRE GAUGE.

PER THOUSAND.

$\frac{3}{8}$ in. Wire.	$\frac{1}{2}$ in. Wide.	$\frac{5}{8}$ in. Wide.	$\frac{3}{4}$ in. Wide.
$\frac{3}{8} \times 1\frac{1}{4}$ 14.00	$\frac{1}{2} \times 1\frac{1}{2}$ 21.00	$\frac{5}{8} \times 1\frac{1}{2}$ 26.25	$\frac{3}{4} \times 2$ 34.25
$\frac{3}{8} \times 1\frac{1}{2}$ 15.75	$\frac{1}{2} \times 1\frac{1}{4}$ 22.75	$\frac{5}{8} \times 2$ 28.00	$\frac{3}{4} \times 2\frac{1}{4}$ 36.75
$\frac{3}{8} \times 1\frac{3}{4}$ 17.50	$\frac{1}{2} \times 1\frac{1}{2}$ 24.50	$\frac{5}{8} \times 2\frac{1}{4}$ 30.75	$\frac{3}{4} \times 2\frac{1}{2}$ 39.25
$\frac{3}{8} \times 2$ 19.25	$\frac{1}{2} \times 2$ 26.25	$\frac{5}{8} \times 2\frac{1}{2}$ 33.25	$\frac{3}{4} \times 2\frac{3}{4}$ 42.00
$\frac{3}{8} \times 2\frac{1}{4}$ 21.00	$\frac{1}{2} \times 2\frac{1}{4}$ 28.00	$\frac{5}{8} \times 2\frac{3}{4}$ 36.00	$\frac{3}{4} \times 3$ 44.75
$\frac{3}{8} \times 2\frac{1}{2}$ 22.75	$\frac{1}{2} \times 2\frac{1}{2}$ 29.75	$\frac{5}{8} \times 3$ 38.50	$\frac{3}{4} \times 3\frac{1}{2}$ 50.00
$\frac{3}{8} \times 2\frac{3}{4}$ 24.50	$\frac{1}{2} \times 2\frac{3}{4}$ 31.50	$\frac{5}{8} \times 3\frac{1}{2}$ 43.75	
$\frac{3}{8} \times 3$ 26.25	$\frac{1}{2} \times 3$ 33.25		

TWIST DRILLS

WITH MORSE, AMERICAN TAPER OR STRAIGHT SHANKS.

Socket for American Taper.	Diameter, Inches.	Price, Each.	Length, Inches.	Standard Socket for Morse Taper.	Socket for American Taper.	Diameter.	Price, Each.	Length, Inches.	Standard Socket for Morse Taper.
No. 4, \$2.50.	1 1/4	.80	6 1/4	No. 1, \$1.20.	1 1/4	1 1/4	4.65	14 1/8	No. 4, \$4.00
No. 3, \$2.00.	1 1/8	.65	6 1/2	No. 2, \$1.80.	1 1/8	1 1/8	4.80	14 1/4	
No. 2, \$1.55.	1 1/2	.70	6 3/4	No. 3, \$2.50.	1 1/2	1 1/2	5.00	14 3/8	
No. 1, \$1.30.	1 3/4	.75	6 7/8		1 3/4	1 3/4	5.20	14 1/2	
	1 7/8	.80	6 7/8		1 7/8	1 7/8	5.40	14 5/8	
	2	.85	7		2	2	5.60	14 3/4	
	2 1/8	.90	7 1/4		2 1/8	2 1/8	5.80	14 7/8	
	2 1/4	.95	7 1/2		2 1/4	2 1/4	6.00	15	
	2 1/2	1.00	7 3/4		2 1/2	2 1/2	6.30	15 1/8	
	2 3/4	1.10	8		2 3/4	2 3/4	6.60	15 1/4	
	3	1.20	8 1/4		3	3	6.90	15 3/8	
	3 1/8	1.30	8 1/2		3 1/8	3 1/8	7.20	15 1/2	
	3 1/4	1.40	8 3/4		3 1/4	3 1/4	7.50	15 5/8	
	3 1/2	1.50	9		3 1/2	3 1/2	7.80	15 3/4	
	3 3/4	1.60	9 1/4		3 3/4	3 3/4	8.10	15 7/8	
	3 7/8	1.70	9 1/2		3 7/8	3 7/8	8.40	16	
	4	1.85	9 3/4		4	4	8.60	16 1/8	
	4 1/8	2.00	9 7/8		4 1/8	4 1/8	8.80	16 1/4	
	4 1/4	2.15	10		4 1/4	4 1/4	9.00	16 3/8	
	4 1/2	2.30	10 1/4		4 1/2	4 1/2	9.20	16 1/2	
	4 3/4	2.45	10 1/2		4 3/4	4 3/4	9.35	16 5/8	
	4 7/8	2.60	10 3/4		4 7/8	4 7/8	9.50	16 7/8	
	5	2.75	10 7/8		5	5	9.65	16 3/4	
	5 1/8	2.90	11		5 1/8	5 1/8	9.80	16 1/2	
	5 1/4	3.00	11 1/4		5 1/4	5 1/4		16 1/2	
	5 1/2	3.20	11 1/2		5 1/2	5 1/2			
	5 3/4	3.40	11 3/4		5 3/4	5 3/4			
	5 7/8	3.60	11 7/8		5 7/8	5 7/8			
	6	3.80	11 3/4		6	6			
	6 1/8	4.00	11 1/2		6 1/8	6 1/8			
	6 1/4	4.20	12		6 1/4	6 1/4			
	6 1/2	4.40	12 1/4		6 1/2	6 1/2			
	6 3/4	4.50	12 1/2		6 3/4	6 3/4			

STRAIGHT SHANK DRILL.

Diameter. In.	Length. In.	Price per Dozen.	Price, Each.	Diameter. In.	Length. In.	Price per Dozen.	Price, Each.
$\frac{1}{16}$	$2\frac{1}{2}$	1.00	.09	$\frac{1}{8}$	$4\frac{3}{8}$	3.90	.35
$\frac{1}{8}$	$2\frac{5}{8}$	1.10	.10	$\frac{1}{4}$	$4\frac{1}{2}$	4.20	.37
$\frac{3}{16}$	$2\frac{3}{4}$	1.20	.11	$\frac{3}{16}$	$4\frac{5}{8}$	4.50	.40
$\frac{1}{4}$	$2\frac{7}{8}$	1.30	.12	$\frac{1}{2}$	$4\frac{3}{4}$	4.80	.42
$\frac{5}{16}$	3	1.45	.13	$\frac{5}{16}$	$4\frac{7}{8}$	5.10	.45
$\frac{3}{8}$	$3\frac{1}{8}$	1.60	.15	$\frac{3}{8}$	5	5.40	.48
$\frac{7}{16}$	$3\frac{1}{4}$	1.80	.16	$\frac{1}{2}$	$5\frac{1}{8}$	5.70	.50
$\frac{1}{2}$	$3\frac{3}{8}$	2.00	.18	$\frac{3}{4}$	$5\frac{1}{4}$	6.00	.53
$\frac{5}{8}$	$3\frac{1}{2}$	2.20	.20	$\frac{1}{2}$	$5\frac{3}{8}$	6.40	.55
$\frac{3}{4}$	$3\frac{5}{8}$	2.40	.21	$\frac{3}{4}$	$5\frac{1}{2}$	6.80	.59
$\frac{7}{8}$	$3\frac{3}{4}$	2.65	.23	$\frac{1}{2}$	$5\frac{5}{8}$	7.20	.63
1	$3\frac{7}{8}$	2.90	.26	$\frac{3}{4}$	$5\frac{3}{4}$	7.50	.65
$1\frac{1}{8}$	4	3.15	.28	$\frac{1}{2}$	$5\frac{7}{8}$	7.75	.67
$1\frac{1}{4}$	$4\frac{1}{8}$	3.40	.30	$\frac{1}{2}$	6	8.00	.70
$1\frac{3}{8}$	$4\frac{1}{4}$	3.65	.32				

TAPER SQUARE SHANK DRILLS FITTING RATCHETS.

Price with Shanks $\frac{5}{8} \times \frac{3}{8}$ in. and $1\frac{1}{2}$ in. long, and Shanks $\frac{3}{4} \times \frac{1}{2}$ in. and $1\frac{1}{4}$ in. long.

Diameter.	Price.	Length.	Diameter.	Price.	Length.	Diameter.	Price.	Length.
$\frac{1}{4}$ inch.	1.00	5 inch.	$\frac{1}{8}$ inch.	1.35	$6\frac{1}{2}$ inch.	$1\frac{1}{8}$ inch.	3.10	9 inch.
$\frac{3}{16}$ inch.	1.05	5 inch.	$\frac{3}{16}$ inch.	1.40	$6\frac{1}{2}$ inch.	$1\frac{1}{4}$ inch.	3.35	9 inch.
$\frac{1}{8}$ inch.	1.10	5 inch.	$\frac{1}{4}$ inch.	1.45	$6\frac{1}{2}$ inch.	$1\frac{1}{2}$ inch.	3.65	9 inch.
$\frac{5}{16}$ inch.	1.15	5 inch.	$\frac{3}{8}$ inch.	1.55	$6\frac{1}{2}$ inch.	$1\frac{3}{4}$ inch.	3.90	9 inch.
$\frac{3}{8}$ inch.	1.20	6 inch.	$\frac{1}{2}$ inch.	1.75	7 inch.	$1\frac{7}{8}$ inch.	4.20	9 inch.
$\frac{7}{16}$ inch.	1.25	$6\frac{1}{4}$ inch.	$\frac{5}{8}$ inch.	2.05	$7\frac{1}{2}$ inch.	$1\frac{7}{8}$ inch.	4.50	9 inch.
$\frac{1}{2}$ inch.	1.25	$6\frac{1}{4}$ inch.	$\frac{3}{4}$ inch.	2.30	8 inch.	$1\frac{1}{2}$ inch.	4.80	9 inch.
$\frac{5}{8}$ inch.	1.30	$6\frac{3}{4}$ inch.	1 inch.	2.55	$8\frac{1}{2}$ inch.			
$\frac{3}{4}$ inch.	1.30	$6\frac{3}{4}$ inch.	$1\frac{1}{8}$ inch.	2.85	9 inch.			

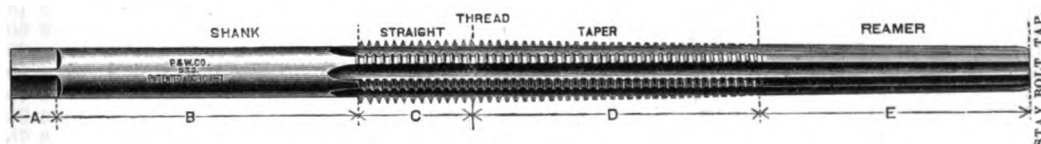
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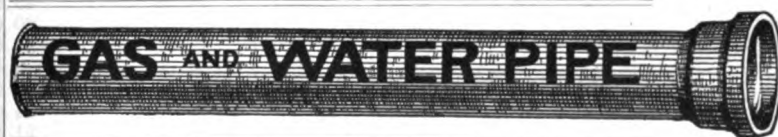
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MACHINE HAND TAPS.

Size.	Whole Length.	Length Thread.	No. v Threads to inch.	Price each.	Price per set of 3 taps.
$\frac{1}{4}$	$2\frac{1}{4}$	$1\frac{1}{8}$	16, 18, 20	.45	1.35
$\frac{1}{8}$	$2\frac{3}{8}$	$1\frac{1}{4}$	16, 18	.50	1.50
$\frac{3}{8}$	$3\frac{1}{8}$	$1\frac{1}{4}$	14, 16, 18	.55	1.65
$\frac{1}{2}$	$3\frac{3}{8}$	$1\frac{3}{8}$	12, 14, 16	.60	1.80
$\frac{5}{8}$	$4\frac{1}{8}$	$1\frac{3}{4}$	12, 13, 14	.70	2.10
$\frac{3}{4}$	$4\frac{1}{2}$	$1\frac{7}{8}$	12, 12, 14	.80	2.40
$\frac{7}{8}$	$4\frac{3}{4}$	2	10, 11, 12	.90	2.70
1	$5\frac{1}{8}$	$2\frac{1}{8}$	11, 12	1.05	3.15
$1\frac{1}{8}$	$5\frac{5}{8}$	$2\frac{1}{4}$	10, 11, 12	1.20	3.60
$1\frac{1}{4}$	$5\frac{1}{2}$	$2\frac{3}{8}$	10	1.40	4.20
$1\frac{1}{2}$	6	$2\frac{1}{2}$	9, 10	1.60	4.80
$1\frac{3}{4}$	$6\frac{1}{8}$	$2\frac{5}{8}$	9	1.80	5.40
$1\frac{7}{8}$	$6\frac{1}{2}$	$2\frac{7}{8}$	8	2.00	6.00
2	$6\frac{5}{8}$	3	7, 8	2.25	6.75
$2\frac{1}{8}$	$6\frac{3}{4}$	$3\frac{1}{4}$	7	2.60	7.80
$2\frac{1}{4}$	$7\frac{1}{4}$	$3\frac{1}{2}$	6	3.00	9.00
$2\frac{3}{8}$	$7\frac{3}{8}$	$3\frac{3}{4}$	6	3.50	10.50
$2\frac{1}{2}$	$8\frac{1}{8}$	$3\frac{1}{2}$	5, 5 $\frac{1}{2}$	4.20	12.60
$2\frac{3}{4}$	$8\frac{1}{4}$	$4\frac{1}{8}$	5	5.00	15.00
$2\frac{7}{8}$	$9\frac{1}{8}$	$4\frac{1}{4}$	4 $\frac{1}{2}$, 5	5.80	17.40
3	$9\frac{3}{4}$	$4\frac{1}{2}$	4 $\frac{1}{2}$	6.70	20.10
$3\frac{1}{8}$		5	4 $\frac{1}{2}$	7.80	23.40
$3\frac{1}{4}$	$10\frac{3}{8}$		4 $\frac{1}{2}$	9.00	27.00
$3\frac{3}{8}$		$5\frac{1}{2}$	4 $\frac{1}{2}$	10.25	30.75
$3\frac{1}{2}$	11		4	11.50	34.50
$3\frac{5}{8}$		6	4	12.75	38.25
$3\frac{3}{4}$	$11\frac{1}{2}$		4	14.00	42.00
$3\frac{7}{8}$		$6\frac{1}{2}$	4	15.50	46.50
4	12		3 $\frac{1}{2}$	17.00	51.00
			3 $\frac{1}{2}$	18.50	55.50
			3 $\frac{1}{2}$	20.00	60.00
			3 $\frac{1}{2}$	22.00	66.00
			3 $\frac{1}{2}$	24.00	72.00
			3 $\frac{1}{2}$	26.00	78.00
			3	28.00	84.00
			3	30.50	91.50
			3	33.00	99.00

MACHINE SCREW TAPS.

Size of Screw Gauge.	Approximate Size in inches.	Standard No. of Threads.	Threads also Furnished.	Price.	
				Each.	Per Doz.
No.					
1	$\frac{1}{16}$		56, 60, 64, 72	.35	4.00
1½	$\frac{1}{8}$		56	.35	4.00
2	$\frac{5}{16}$	56	48, 64	.35	4.00
3	$\frac{3}{8}$	48	40, 44, 56	.35	4.00
4	$\frac{7}{16}$	36	30, 32, 40, 42, 44, 48	.35	4.00
5	$\frac{1}{2}$	36	30, 32, 40, 44, 48	.35	4.00
6	$\frac{9}{16}$	32	30, 36, 38, 40, 44, 48	.35	4.00
7	$\frac{5}{8}$	32	24, 28, 30, 36, 40	.35	4.00
8	$\frac{11}{16}$	32	24, 30, 36, 40, 44	.35	4.00
9	$\frac{3}{4}$	30	24, 28, 32	.35	4.00
10	$\frac{7}{8}$	24	20, 22, 28, 30, 32, 36	.35	4.00
11	$\frac{1}{2}$	24	22, 28, 30	.35	4.00
12	$\frac{1}{2}$	24	20, 22, 26, 28, 30, 32, 34, 36	.35	4.00
13	$\frac{1}{2}$	22	20, 24, 32	.38	4.40
14	$\frac{1}{4}$	20	16, 18, 22, 24, 26	.38	4.40
15	$\frac{1}{2}$	20	18, 22, 24	.38	4.40
16	$\frac{1}{2}$	18	16, 20, 22, 24, 26	.38	4.40
17	$\frac{1}{2}$	18	16, 20	.38	4.40
18	$\frac{1}{2}$	18	16, 20, 22, 24, 26	.38	4.40
19	$\frac{1}{2}$	18	16, 20, 22, 24	.38	4.40
20	$\frac{1}{2}$	16	18, 20, 22, 24	.45	5.30
22	$\frac{1}{2}$	16	18	.45	5.30
24	$\frac{3}{8}$	16	14, 18, 20, 22, 24	.45	5.30
26	$\frac{1}{2}$	16	14	.53	6.30
28	$\frac{1}{2}$	14	16	.53	6.30
30	$\frac{1}{2}$	14	16	.53	6.30

STAY-BOLT TAPS.

LENGTHS.	DIAMETER, INCHES.					
	$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.	$\frac{1}{2}$, 1.	$1\frac{1}{8}$, $1\frac{1}{2}$.	$1\frac{1}{8}$, $1\frac{1}{4}$.	$1\frac{1}{2}$, $1\frac{3}{4}$.	$1\frac{3}{4}$, 1½.
	Price.	Price.	Price.	Price.	Price.	Price.
12 Inch	4.50					
14 Inch	5.00					
16 Inch	5.60	6.60	7.60	9.00	11.00	13.00
18 Inch	7.20	8.50	9.50	10.50	12.50	14.50
21 Inch	8.00	9.35	10.35	12.00	14.00	16.00
24 Inch	8.80	10.20	11.20	12.75	15.00	17.00
27 Inch	10.90	12.25	13.25	14.75	17.00	19.00
30 Inch	13.00	14.25	15.25	16.50	18.50	20.00
33 Inch	14.00	15.40	16.40	18.00	20.00	22.00
36 Inch	15.00	16.50	17.50	19.50	21.50	23.50
39 Inch	16.50	18.15	20.00	22.00	24.00	26.00
34 Inch	18.00	19.75	22.00	24.00	26.00	28.00
48 Inch	19.00	21.00	23.50	25.50	28.00	30.00
54 Inch	20.00	22.25	25.00	27.00	30.00	32.00

In ordering Stay-Bolt Taps, state diameter and number of threads to the inch; also, length of parts A, B, C, D and E.

PIPE TAPS AND REAMERS.

Price	1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25	10.50	15.00
Diameter	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3 in.
Threads per inch	27	18	18	14	14	$11\frac{1}{2}$	$11\frac{1}{2}$	$11\frac{1}{2}$	$11\frac{1}{2}$	8	8

Standard Taper is 1 inch to the foot.
Pipe Taps $2\frac{1}{2}$ inches and larger, have inserted teeth.

PATCH-BOLT TAPS.

Diameter, Inches.	Number of Threads to Inch.	Price, Each.	Diameter, Inches.	Number of Threads to Inch.	Price, Each.
$\frac{1}{8}$	12	.70	$1\frac{1}{8}$	12	1.40
$\frac{1}{4}$	12	.80	$\frac{7}{8}$	12	1.60
$\frac{3}{8}$	12	.90	$1\frac{1}{4}$	12	1.80
$1\frac{1}{8}$	12	1.05	1	12	2.00
$\frac{3}{4}$	12	1.20			

MACHINE OR SOLID BOLT DIES.

SIZES.	No. of Threads.	Size of Square.	Thickness	Prices.
$\frac{1}{4}$ inch	16, 18, 20	$2\frac{1}{2}$ inch.	$\frac{1}{8}$ inch.	1.80
$\frac{1}{2}$ inch	16, 18	$2\frac{1}{2}$ inch.	$\frac{1}{8}$ inch.	1.80
$\frac{3}{8}$ inch	14, 16, 18	$2\frac{1}{2}$ inch.	$\frac{1}{8}$ inch.	1.80
$\frac{7}{8}$ inch	12, 14, 16	$2\frac{1}{2}$ inch.	$\frac{1}{8}$ inch.	1.80
$1\frac{1}{8}$ inch	12, 13, 14	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	1.80
$1\frac{1}{4}$ inch	12, 14	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	1.80
$1\frac{1}{2}$ inch	10, 11, 12	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.00
$1\frac{3}{4}$ inch	11, 12	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.10
$2\frac{1}{8}$ inch	10, 12	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.20
$2\frac{1}{4}$ inch	10	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.30
$2\frac{3}{8}$ inch	9, 10, 12	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.40
$2\frac{1}{2}$ inch	9	$2\frac{1}{2}$ inch.	$\frac{3}{4}$ inch.	2.55
$2\frac{7}{8}$ inch	8, 12	$2\frac{1}{2}$ inch.	1 inch.	2.70
3 inch	7, 8	$2\frac{1}{2}$ inch.	1 inch.	3.00
$3\frac{1}{8}$ inch	7	$2\frac{1}{2}$ inch.	1 inch.	3.30
$3\frac{1}{4}$ inch	6	$2\frac{1}{2}$ inch.	1 inch.	3.60
$3\frac{3}{8}$ inch	6	3 inch.	1 inch.	3.90
$3\frac{1}{2}$ inch	5, $5\frac{1}{2}$	3 inch.	1 inch.	4.20
$3\frac{3}{4}$ inch	5	3 inch.	$1\frac{1}{4}$ inch.	5.40
$4\frac{1}{8}$ inch	$4\frac{1}{2}$, 5	$3\frac{1}{2}$ inch.	$1\frac{1}{2}$ inch.	6.50
$4\frac{1}{4}$ inch	$4\frac{1}{2}$, 5	$3\frac{3}{4}$ inch.	2 inch.	7.50



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SOLID REAMERS.

Diameter.	Length in Inches.	Length of Flute in Ins.	Price, Each.	Diameter.	Length in Inches.	Length of Flute in Ins.	Price, Each.
1 1/8	3	1 1/4	1.00	1 1/2	12 1/2	6 1/4	5.40
1 1/4	3 1/4	1 5/8	1.10	1 5/8	12 5/8	6 1/4	5.60
1 1/2	3 1/2	1 3/4	1.20	1 3/4	12 3/4	6 1/4	5.80
1 3/4	3 3/4	1 7/8	1.30	1 7/8	12 7/8	6 1/4	6.00
2	4	2	1.40	1 7/8	12 7/8	6 1/4	6.20
2 1/4	4 1/4	2 1/8	1.45	1 7/8	13	6 1/4	6.40
2 1/2	4 1/2	2 1/4	1.50	1 7/8	13	6 1/4	6.60
2 3/4	4 3/4	2 3/8	1.55	1 7/8	13	6 1/4	6.80
3	5	2 1/2	1.60	1 7/8	13	6 1/4	7.00
3 1/4	5 1/4	2 5/8	1.70	1 7/8	13	6 1/4	7.20
3 1/2	5 1/2	2 3/4	1.75	1 7/8	13 1/2	6 3/4	7.40
3 3/4	5 3/4	2 7/8	1.85	1 7/8	13 1/2	6 3/4	7.60
4	6	3	1.90	1 7/8	13 1/2	6 3/4	7.80
4 1/4	6 1/4	3 1/8	1.95	1 7/8	13 1/2	6 3/4	8.00
4 1/2	6 1/2	3 1/4	2.00	1 7/8	13 1/2	6 3/4	8.20
4 3/4	6 3/4	3 3/8	2.10	1 7/8	13 1/2	6 3/4	8.40
5	7	3 1/2	2.20	1 7/8	13 1/2	6 3/4	8.60
5 1/4	7 1/4	3 3/4	2.30	1 7/8	14	7	8.80
5 1/2	7 1/2	3 7/8	2.40	1 7/8	14	7	9.00
5 3/4	7 3/4	4	2.50	1 7/8	14	7	9.20
6	8	4 1/8	2.60	1 7/8	14	7	9.40
6 1/4	8 1/4	4 1/4	2.70	1 7/8	14	7	9.60
6 1/2	8 1/2	4 1/2	2.80	2	14 1/2	7 1/4	10.00
6 3/4	8 3/4	4 3/4	2.85	2 1/8	14 1/2	7 1/4	10.40
7	9	4 1/2	3.10	2 1/8	15	7 1/2	10.80
7 1/4	9 1/4	4 3/4	3.25	2 1/8	15	7 1/2	11.20
7 1/2	9 1/2	4 1/2	3.40	2 1/8	15	7 1/2	11.60
7 3/4	9 3/4	4 1/2	3.55	2 1/8	15	7 1/2	12.00
8	10	5	3.70	2 1/8	15 1/2	7 3/4	12.80
8 1/4	10 1/4	5 1/8	3.85	2 1/8	15 1/2	7 3/4	13.40
8 1/2	10 1/2	5 1/4	4.00	2 1/8	15 1/2	7 3/4	14.00
8 3/4	10 3/4	5 1/4	4.15	2 1/8	16	8	14.60
9	11	5 1/2	4.30	2 1/8	16	8	15.40
9 1/4	11 1/4	5 1/2	4.45	2 1/8	16	8	16.20
9 1/2	11 1/2	5 1/2	4.60	2 1/8	16 1/2	8 1/4	17.00
9 3/4	11 3/4	5 1/2	4.75	2 1/8	16 1/2	8 1/4	17.80
10	12	6	4.90	2 1/8	16 1/2	8 1/4	18.60
10 1/4	12 1/4	6 1/8	5.05	2 1/8	16 1/2	8 1/4	19.40
10 1/2	12 1/2	6 1/4	5.20	3	16 1/2	8 1/4	
10 3/4	12 3/4	6 1/4					
11	12 1/2	6 1/4					

SOLID REAMERS.

WITH MORSE TAPER SHANKS.

Diameter.	Length in Inches.	Length of Flute in Ins.	Price, Each.	Socket for Morse Taper.	Diameter.	Length in Inches.	Length of Flute in Ins.	Price, Each.	Socket for Morse Taper.
$1\frac{1}{4}$	$5\frac{3}{8}$	2	1.50	No. 1, \$1.20	$1\frac{1}{4}$	$12\frac{1}{8}$	$6\frac{1}{8}$	5.90	No. 4, \$4.00
$1\frac{3}{8}$	$5\frac{3}{8}$	2	1.55		13	$6\frac{1}{8}$	$6\frac{1}{8}$	6.10	
$1\frac{1}{2}$	$5\frac{3}{8}$	$2\frac{1}{4}$	1.60		13	$6\frac{1}{8}$	$6\frac{1}{8}$	6.30	
$1\frac{5}{8}$	$5\frac{3}{8}$	$2\frac{1}{4}$	1.65		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	6.50	
$1\frac{7}{8}$	$5\frac{3}{8}$	$2\frac{1}{4}$	1.70		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	6.70	
2	$5\frac{3}{8}$	$2\frac{1}{4}$	1.80		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	6.90	
$2\frac{1}{8}$	$6\frac{1}{8}$	$2\frac{3}{4}$	1.85		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	7.10	
$2\frac{1}{4}$	$6\frac{1}{8}$	$2\frac{3}{4}$	1.95		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	7.30	
$2\frac{3}{8}$	$6\frac{1}{8}$	3	2.00		$13\frac{1}{8}$	$6\frac{1}{8}$	$6\frac{1}{8}$	7.50	
$2\frac{1}{2}$	$6\frac{1}{8}$	3	2.10		$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	7.70	
$2\frac{5}{8}$	$6\frac{3}{4}$	$3\frac{1}{4}$	2.15	No. 2, \$1.80	$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	7.85	No. 5, \$7.50
$2\frac{7}{8}$	$6\frac{3}{4}$	$3\frac{1}{4}$	2.25		$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	8.00	
3	$7\frac{1}{8}$	$3\frac{1}{2}$	2.30		$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	8.20	
$3\frac{1}{8}$	$7\frac{1}{8}$	$3\frac{1}{2}$	2.40		$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	8.40	
$3\frac{1}{4}$	8	$3\frac{3}{8}$	2.50		$14\frac{1}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$	8.60	
$3\frac{3}{8}$	8	$3\frac{3}{8}$	2.60		15	7	7	8.80	
$3\frac{1}{2}$	$8\frac{3}{8}$	$4\frac{1}{8}$	2.70		15	7	7	9.00	
$3\frac{5}{8}$	$8\frac{3}{8}$	$4\frac{1}{8}$	2.80		15	7	7	9.20	
$3\frac{7}{8}$	$8\frac{3}{8}$	$4\frac{1}{8}$	2.90		15	7	7	9.40	
4	$8\frac{3}{8}$	$4\frac{1}{8}$	3.05		15	7	7	9.60	
$4\frac{1}{8}$	$9\frac{1}{8}$	$4\frac{1}{2}$	3.20	No. 3, \$2.50	$15\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{1}{4}$	10.00	
$4\frac{1}{4}$	$9\frac{1}{8}$	$4\frac{1}{2}$	3.35		$15\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{1}{4}$	10.40	
$4\frac{3}{8}$	10	$5\frac{1}{8}$	3.50		$15\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{1}{4}$	10.80	
$4\frac{1}{2}$	10	$5\frac{1}{8}$	3.65		$15\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{1}{4}$	11.30	
$4\frac{5}{8}$	$10\frac{3}{8}$	$5\frac{1}{8}$	3.80		16	$7\frac{1}{2}$	$7\frac{1}{2}$	11.80	
$4\frac{3}{4}$	$10\frac{3}{8}$	$5\frac{1}{8}$	3.95		16	$7\frac{1}{2}$	$7\frac{1}{2}$	12.30	
$4\frac{7}{8}$	$10\frac{3}{8}$	$5\frac{1}{8}$	4.10		16	$7\frac{1}{2}$	$7\frac{1}{2}$	12.80	
5	$10\frac{3}{8}$	$5\frac{1}{8}$	4.25		16	$7\frac{1}{2}$	$7\frac{1}{2}$	13.40	
$5\frac{1}{8}$	$10\frac{7}{8}$	$5\frac{1}{8}$	4.40		$16\frac{1}{2}$	$7\frac{3}{4}$	$7\frac{3}{4}$	14.00	
$5\frac{1}{4}$	$10\frac{7}{8}$	$5\frac{1}{8}$	4.55		$16\frac{1}{2}$	$7\frac{3}{4}$	$7\frac{3}{4}$	14.60	
$5\frac{3}{8}$	$11\frac{1}{8}$	6	4.70	No. 4, \$4.00	$16\frac{1}{2}$	$7\frac{3}{4}$	$7\frac{3}{4}$	15.40	
$5\frac{1}{2}$	$11\frac{1}{8}$	6	4.85		$16\frac{1}{2}$	$7\frac{3}{4}$	$7\frac{3}{4}$	16.20	
$5\frac{5}{8}$	$11\frac{1}{8}$	$6\frac{1}{8}$	5.00		17	8	8	17.00	
$5\frac{3}{4}$	$11\frac{1}{8}$	$6\frac{1}{8}$	5.15		17	8	8	17.80	
$5\frac{7}{8}$	$12\frac{1}{4}$	$6\frac{1}{4}$	5.30		17	8	8	18.60	
6	$12\frac{1}{4}$	$6\frac{1}{4}$	5.50		17	8	8	19.40	
$6\frac{1}{8}$	$12\frac{1}{4}$	$6\frac{1}{4}$	5.70						

NATIONAL IRON CLASSIFICATION.

ROUNDS AND SQUARES.

1	to $1\frac{1}{8}$	Base
2	to $2\frac{1}{8}$	20 per one hundred pounds, extra
3	to $3\frac{1}{8}$	50 per one hundred pounds, extra
$3\frac{5}{8}$	to 4	80 per one hundred pounds, extra
$4\frac{1}{8}$	to $4\frac{1}{2}$	1.00 per one hundred pounds, extra
$4\frac{3}{8}$	to 5	1.30 per one hundred pounds, extra
$5\frac{1}{8}$	to 6	1.80 per one hundred pounds, extra
$6\frac{1}{8}$	to $6\frac{1}{2}$	2.20 per one hundred pounds, extra
$6\frac{3}{8}$	to $7\frac{1}{4}$	2.50 per one hundred pounds, extra
$\frac{3}{4}$	to $\frac{7}{8}$	10 per one hundred pounds, extra
$\frac{5}{8}$	to $1\frac{1}{8}$	20 per one hundred pounds, extra
$\frac{7}{8}$	to $1\frac{1}{4}$	30 per one hundred pounds, extra
$1\frac{1}{8}$	to $1\frac{3}{8}$	40 per one hundred pounds, extra
$1\frac{3}{8}$	to $1\frac{5}{8}$	50 per one hundred pounds, extra
$1\frac{5}{8}$	to $1\frac{7}{8}$	70 per one hundred pounds, extra
$1\frac{7}{8}$	to 2	80 per one hundred pounds, extra
2	to $2\frac{1}{8}$	1.40 per one hundred pounds, extra
$2\frac{1}{8}$	to $2\frac{1}{2}$	2.50 per one hundred pounds, extra

FLATS.

$1\frac{1}{4}$	to 4	x $\frac{3}{8}$	to 1	Base
$4\frac{1}{4}$	to 6	x $\frac{3}{8}$	to 1	10 per one hundred pounds, extra
$4\frac{1}{4}$	to 6	x $1\frac{1}{8}$	to $1\frac{1}{2}$	40 per one hundred pounds, extra
$6\frac{1}{4}$	to 8	x $\frac{3}{8}$	to 1	60 per one hundred pounds, extra
$6\frac{1}{4}$	to 8	x $1\frac{1}{8}$	to $1\frac{1}{2}$	60 per one hundred pounds, extra
$8\frac{1}{4}$	to 10	x $\frac{3}{8}$	to 1	80 per one hundred pounds, extra
$1\frac{3}{8}$	to 4	x $1\frac{1}{8}$	to $1\frac{1}{2}$	30 per one hundred pounds, extra
2	to 4	x $1\frac{1}{8}$	to 2	50 per one hundred pounds, extra
$4\frac{1}{4}$	to 6	x $1\frac{1}{8}$	to 2	60 per one hundred pounds, extra
$6\frac{1}{4}$	to 8	x $1\frac{1}{8}$	to 2	80 per one hundred pounds, extra
$8\frac{1}{4}$	to 10	x $1\frac{1}{8}$	to $1\frac{1}{2}$	90 per one hundred pounds, extra
$8\frac{1}{4}$	to 10	x $1\frac{1}{8}$	to 2	1.00 per one hundred pounds, extra
2	to 4	x $2\frac{1}{8}$	to 3	60 per one hundred pounds, extra
$4\frac{1}{4}$	to 6	x $2\frac{1}{8}$	to 3	80 per one hundred pounds, extra
$6\frac{1}{4}$	to 8	x $2\frac{1}{8}$	to 3	1.00 per one hundred pounds, extra
$1\frac{3}{8}$	to $1\frac{3}{4}$	x $\frac{3}{8}$	to 1	10 per one hundred pounds, extra
1	to $1\frac{1}{4}$	x $\frac{3}{8}$	to $\frac{3}{4}$	20 per one hundred pounds, extra
$\frac{3}{4}$	to $1\frac{1}{8}$	x $\frac{3}{8}$	to $\frac{3}{4}$	40 per one hundred pounds, extra
$\frac{5}{8}$	to $1\frac{1}{8}$	x $\frac{3}{8}$	to $\frac{3}{4}$	50 per one hundred pounds, extra
$\frac{1}{2}$	to $1\frac{1}{8}$	x $\frac{3}{8}$	to $\frac{1}{2}$	80 per one hundred pounds, extra

HEAVY BAND IRON.

$8\frac{1}{4}$	to 10	x $1\frac{1}{4}$	to $\frac{1}{8}$	70 per one hundred pounds, extra
7	to 8	x $1\frac{1}{4}$	to $\frac{1}{8}$	70 per one hundred pounds, extra
$6\frac{1}{4}$	to $6\frac{3}{4}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	50 per one hundred pounds, extra
$4\frac{1}{4}$	to 6	x $1\frac{1}{4}$	to $\frac{1}{8}$	30 per one hundred pounds, extra
$1\frac{1}{2}$	to 4	x $1\frac{1}{4}$	to $\frac{1}{8}$	20 per one hundred pounds, extra
1	to $1\frac{3}{8}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	30 per one hundred pounds, extra
$\frac{3}{4}$	to $1\frac{1}{8}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	50 per one hundred pounds, extra
$\frac{5}{8}$	to $1\frac{1}{8}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	80 per one hundred pounds, extra
$\frac{1}{2}$	to $1\frac{1}{8}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	1.00 per one hundred pounds, extra
$\frac{3}{8}$	to $1\frac{1}{8}$	x $1\frac{1}{4}$	to $\frac{1}{8}$	1.50 per one hundred pounds, extra

Heavy bands, $\frac{1}{8}$ -inch thick, 10c. per one hundred pounds higher than $\frac{1}{4}$ to $\frac{1}{8}$ thick. Bevel edge shaft iron 10c. higher than same size of heavy bands.

REPUBLIC IRON AND STEEL COMPANY.

GENERAL OFFICES :
Stock Exchange Building,
CHICAGO, ILL.

FOUNDRY, BESSEMER AND MILL PIG IRON.

DISTRICT SALES OFFICES :

Ellicott Square, Buffalo, N. Y. ; Manhattan Life Building, New York ; Perry Payne Building, Cleveland, Ohio ; Mermod-Jaccard Building, St. Louis ; Birmingham, Ala. ; Cincinnati, Ohio ; Endicott Arcade, St. Paul, Minn.

BAR IRON :

Common, Refined and B. B. Iron,
Plats, Rounds, Squares, Ovals, Etc.,
Chains and Rivet Iron,
Maud S. Horse Shoe Bar,
Skelp Iron, Etc.

PLATES

and Angles, Turnbuckles,
"T" Rails, 8 to 20 pounds,
Cold Rolled Steel, Cut Nails,

SHEETS (Black and Galvanized),
Harrow Teeth, Bolts and Nuts,

R. R. SPIKES,

Steel Fence Posts, Steel Whiffletrees,
Cross Arm Braces, Pole Steps.

BAR STEEL :

Bessemer and Open Hearth,
Plats, Rounds, Squares, Ovals,
Angles, Channels, Special Shapes,
Round Edge Steel Tire,
Agricultural Shapes, Etc.

Standard Material.

Quick Service.

Low Prices.

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BALTIMORE, MD.

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Supplies ||

*Jobbers of Iron Pipe, Brass and Iron Goods for Water, Steam and
Gas ; Plumbers', Steam-Fitters' and Machinists' Tools and Supplies.*

MAIN OFFICE AND STORE :

No. 2324-2326 Boston Street.

WAREHOUSES :

2112-14-16-18-20 Boston Street.

NATIONAL IRON CLASSIFICATION—Continued.

LIGHT BANDS.

7 to 8	x Nos. 9 to $\frac{1}{8}$	90 per one hundred pounds, extra
7 to 8	x 10, 11, 12	1.00 per one hundred pounds, extra
$6\frac{1}{4}$ to $6\frac{3}{4}$	x 9 to $\frac{1}{8}$	70 per one hundred pounds, extra
$6\frac{1}{4}$ to $6\frac{3}{4}$	x 10, 11, 12	80 per one hundred pounds, extra
$4\frac{1}{4}$ to 6	x 9 to $\frac{1}{8}$	50 per one hundred pounds, extra
$4\frac{1}{4}$ to 6	x 10, 11, 12	60 per one hundred pounds, extra
$1\frac{1}{4}$ to 4	x 9 to $\frac{1}{8}$	40 per one hundred pounds, extra
$1\frac{1}{4}$ to 4	x 10, 11, 12	50 per one hundred pounds, extra
1 to $1\frac{1}{8}$	x 9 to $\frac{1}{8}$	50 per one hundred pounds, extra
1 to $1\frac{1}{8}$	x 10, 11, 12	60 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{1}{8}$	x 9 to $\frac{1}{8}$	60 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{1}{8}$	x 10, 11, 12	70 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{3}{4}$	x 9 to $\frac{1}{8}$	80 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{3}{4}$	x 10, 11, 12	90 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{5}{8}$	x 9 to $\frac{1}{8}$	1.00 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{5}{8}$	x 10, 11, 12	1.10 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{7}{8}$	x 9 to $\frac{1}{8}$	1.30 per one hundred pounds, extra
$\frac{1}{8}$ to $\frac{7}{8}$	x 10, 11, 12	1.40 per one hundred pounds, extra
$\frac{3}{8}$ x Nos. 9 to $\frac{1}{8}$		1.50 per one hundred pounds, extra
$\frac{3}{8}$ x 10, 11, 12		1.60 per one hundred pounds, extra

BEVEL EDGE BOX IRON.

Same as Light Bands of Same Sizes.

OVAL IRON.

$\frac{7}{8}$ to $1\frac{1}{2}$	40 per one hundred pounds, extra
$\frac{3}{4}$ to $1\frac{1}{8}$	50 per one hundred pounds, extra
$\frac{5}{8}$ to $1\frac{1}{8}$	60 per one hundred pounds, extra
$\frac{1}{2}$ to $1\frac{1}{8}$	80 per one hundred pounds, extra
$\frac{3}{8}$ to $1\frac{1}{8}$	1.10 per one hundred pounds, extra
$\frac{1}{2}$ to $1\frac{1}{8}$ x $1\frac{1}{8}$	1.00 per one hundred pounds, extra
$\frac{3}{8}$ to $1\frac{1}{8}$ x $1\frac{1}{8}$	1.20 per one hundred pounds, extra

HALF OVAL AND HALF ROUND.

$2\frac{1}{4}$ to 3	60 per one hundred pounds, extra
$\frac{7}{8}$ to 2	50 per one hundred pounds, extra
$\frac{3}{4}$ to $1\frac{1}{4}$	70 per one hundred pounds, extra
$\frac{5}{8}$ to $1\frac{1}{4}$	90 per one hundred pounds, extra
$\frac{1}{2}$ to $1\frac{1}{4}$	1.20 per one hundred pounds, extra
$\frac{3}{8}$ to $1\frac{1}{4}$	2.50 per one hundred pounds, extra
$\frac{1}{8}$ to $1\frac{1}{4}$	3.50 per one hundred pounds, extra
$\frac{1}{4}$ to $1\frac{1}{4}$	4.50 per one hundred pounds, extra

Half oval, less than $\frac{1}{4}$ their width in thickness, extra price.

HORSE SHOE IRON.

All sizes	1c. extra
Cutting to specified length, 2 feet and over	$\frac{1}{4}$ c. extra

P. J. HART.

EDW. A. COHEN.

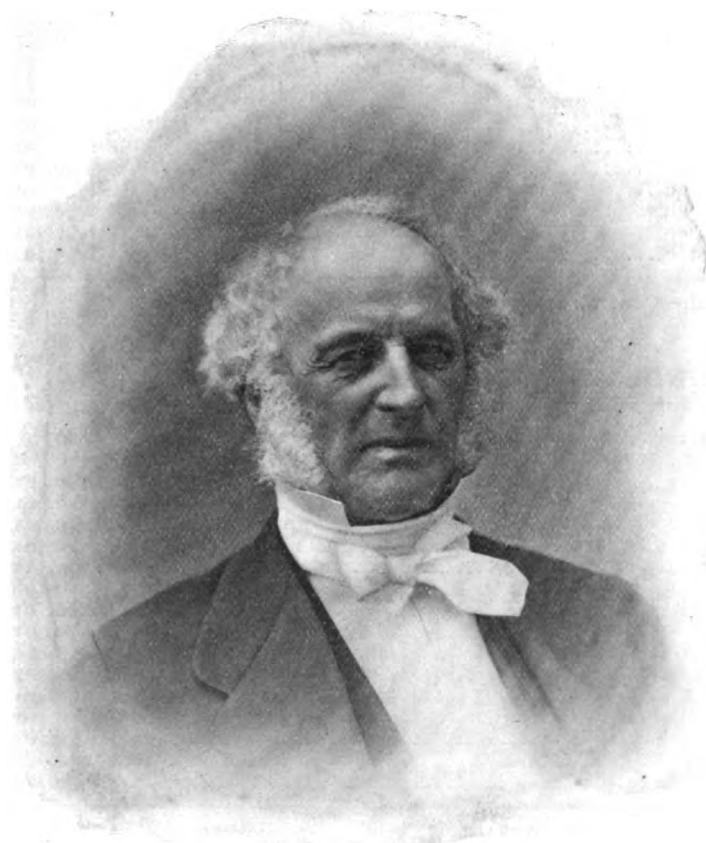
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The prophetic words of the "Commodore," thirty odd years ago, hold good to-day. "The Fitch Process" is without a rival worthy of the name. It is a scientific preparation used by nearly all Railroad Master Mechanics and Master Car-Builders from Maine to California.

CHAS. H. FITCH.

P. O. BOX 186,
JERSEY CITY, N. J.

STANDARD STEEL CLASSIFICATION.

FLAT BARS AND HEAVY BANDS.

1	to 6	inch	x	$\frac{3}{8}$	to 1	inch	Base.
1	to 6	inch	x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{16}$	to $\frac{1}{8}$	inch	x	$\frac{3}{8}$	to $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{16}$	to $\frac{1}{8}$	inch	x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	and $\frac{5}{8}$	inch	x	$\frac{3}{8}$	to $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	and $\frac{5}{8}$	inch	x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			x	$\frac{3}{8}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$			x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			x	$\frac{3}{8}$			1 c. extra
$\frac{1}{8}$			x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			x	$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	to 6	inch	x	$\frac{1}{4}$	to $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	to 6	inch	x	$\frac{1}{4}$	to $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{4}$	to 6	inch	x	$\frac{1}{8}$	to $2\frac{3}{4}$	inch	$\frac{1}{10}$ c. extra
$3\frac{1}{8}$	to 6	inch	x	3	to 4	inch	$\frac{1}{10}$ c. extra

For intermediate sizes, the next highest extra to be charged.

LIGHT BARS AND BANDS.

$1\frac{1}{2}$	to 6	inch	x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$1\frac{1}{2}$	to 6	inch	x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
1	to $1\frac{1}{4}$	inch	x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
1	to $1\frac{1}{4}$	inch	x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{16}$	to $\frac{1}{8}$	inch	x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{16}$	to $\frac{1}{8}$	inch	x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{16}$	and $\frac{3}{4}$	inch	x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	1 c. extra
$\frac{1}{16}$	and $\frac{3}{4}$	inch	x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	and $\frac{5}{8}$	inch	x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$	and $\frac{5}{8}$	inch	x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$			x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$			x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{4}$			x	Nos. 7, 8, 9 and $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{4}$			x	Nos. 10, 11, 12 and $\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra

For intermediate sizes, the next highest extra to be charged.

ROUNDS AND SQUARES.

$\frac{3}{4}$	to 3	inch	Base.
$\frac{5}{8}$	to $1\frac{1}{8}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$	to $\frac{1}{4}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{8}$			$\frac{1}{10}$ c. extra
$\frac{1}{8}$			$\frac{1}{10}$ c. extra
$\frac{1}{4}$	and $\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$\frac{1}{4}$			1 c. extra
$\frac{1}{4}$			2 c. extra
$3\frac{1}{8}$	to $3\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$3\frac{1}{8}$	to 4	inch	$\frac{1}{10}$ c. extra
$4\frac{1}{8}$	to $4\frac{1}{2}$	inch	$\frac{1}{10}$ c. extra
$4\frac{1}{8}$	to 5	inch	$\frac{1}{10}$ c. extra
$5\frac{1}{8}$	to $5\frac{1}{2}$	inch	1 c. extra
$5\frac{1}{8}$	to 6	inch	$\frac{1}{10}$ c. extra
$6\frac{1}{8}$	to $6\frac{1}{2}$	inch	2 c. extra
$6\frac{1}{8}$	to 7	inch	$\frac{1}{10}$ c. extra

For intermediate sizes, the next highest extra to be charged.

Bars up to 5-inch diameter over 24 feet long, and bars larger than 5-inch diameter over 18 feet long, subject to special prices.

Machine Straightening and Centering, $\frac{1}{10}$ c. extra.

STANDARD STEEL CLASSIFICATION—Continued.

OVALS.

$\frac{7}{8}$ to $1\frac{1}{4}$ inch	$\frac{1}{10}$ c. extra
$\frac{3}{4}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{5}{8}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{3}{8}$ to $1\frac{1}{8}$ inch	1 c. extra

For intermediate sizes, the next highest extra to be charged.

HALF OVALS AND HALF ROUNDS.

$\frac{7}{8}$ to $1\frac{1}{4}$ inch	$\frac{1}{10}$ c. extra
$\frac{3}{4}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{5}{8}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{1}{2}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{3}{8}$ to $1\frac{1}{8}$ inch	1 c. extra

For intermediate sizes, the next highest extra to be charged.

Extras for Cutting Flats, Rounds, Squares, Ovals, Half Ovals and Half Rounds to Specified Lengths.

Hot Sawing or Shearing, 24 inches and longer bars	$\frac{1}{10}$ c. extra
Hot Sawing or Shearing, 12 to 24 inches	$\frac{1}{10}$ c. extra
Hot Shearing, 6 to 12 inches	$\frac{1}{10}$ c. extra
Machine Cutting, specified lengths, above 24 inches	$\frac{1}{10}$ c. extra
Machine Cutting, specified lengths, 12 to 24 inches	$\frac{1}{10}$ c. extra

Machine Cutting, to specified lengths, less than 12 inches, according to contract, but not less than $\frac{1}{10}$ c. extra on each side.

No charge for Shear Cutting to multiple lengths of 12 inches and under.

All sizes not enumerated, subject to special arrangement.

ROUND SPRING STEEL—Pernot Open-Hearth.

$\frac{5}{8}$ to $1\frac{1}{2}$ inch	Base.
$\frac{1}{2}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{3}{8}$ to $1\frac{1}{8}$ inch	$\frac{1}{10}$ c. extra
$\frac{1}{4}$	1 c. extra
$\frac{1}{8}$	1 c. extra

Spirals cut to lengths, $\frac{1}{10}$ c. per pound extra.

Spirals cut to lengths and tapered, $\frac{1}{10}$ c. per pound extra.

FLAT SPRING STEEL—Pernot Open-Hearth.

$1\frac{1}{4}$ to 6 inch x No. 4 to $\frac{1}{2}$ inch	Base.
1 and $1\frac{1}{8}$ inch x No. 1 to 4 inch	$\frac{1}{10}$ c. extra
1 to 3 inch x No. 5 to 7 inch	$\frac{1}{10}$ c. extra
$\frac{3}{4}$ and $1\frac{1}{8}$ inch x No. 1 to 7 inch	$\frac{1}{10}$ c. extra
$\frac{3}{8}$ to $1\frac{1}{8}$ inch x No. 1 to 7 inch	1 c. extra
$\frac{3}{4}$ to 3 inch x No. 8 to 10 inch	1 c. extra
$\frac{3}{4}$ to 3 inch x No. 11 to 16 inch	1 c. extra
$\frac{3}{4}$ to 3 inch x No. 17 to 20 inch	2 c. extra
$\frac{3}{8}$ to $\frac{5}{8}$ inch x No. 10 to 16 inch	4 c. extra
$\frac{3}{8}$ to $\frac{5}{8}$ inch x No. 17 to 20 inch	5 c. extra
$\frac{3}{8}$ to $\frac{5}{8}$ inch x No. 21 to 24 inch	6 c. extra

Cut to length, 24 inches and over, $\frac{1}{10}$ c. per pound extra, and under, by special contract.

MANUFACTURERS' PRICE LIST.

(SUBJECT TO CHANGE).

COE'S GILDING WHEELS, RIBBON GOLD AND ALUMINUM LEAF.

Discounts Allowed According to Quantities.

WIDTHS.	XX GOLD LEAF.	IN. ROLLS.	WIDTHS.	ALUMINUM LEAF.	IN. ROLLS.
3-16	per box, 16 rolls	\$6.05	3-16	per box, 16 rolls	\$1 45
1-4	per box, 12 rolls	5.55	1-4	per box, 12 rolls	1 25
5-16	per box, 10 rolls	5.55	5-16	per box, 10 rolls	1 25
3-8	per box, 8 rolls	5.55	3-8	per box, 8 rolls	1 15
7-16	per box, 7 rolls	5.45	7-16	per box, 7 rolls	1 10
1-2	per box, 6 rolls	5.43	1-2	per box, 6 rolls	1 10
5-8	per box, 5 rolls	5.35	5-8	per box, 5 rolls	1 05
3-4	per box, 4 rolls	5.35	3-4	per box, 4 rolls	1 05
7-8	per box, 3 rolls	4.75	7-8	per box, 3 rolls	.95
1 1-16	per box, 3 rolls	5.30	1 1-16	per box, 3 rolls	1 00
1 1-4	per box, 2 rolls	4.25	1 1-4	per box, 2 rolls	.90
1 3-8	per box, 2 rolls	4.65	1 3-8	per box, 2 rolls	.93
1 1-2	per box, 2 rolls	4.85	1 1-2	per box, 2 rolls	.95
1 5-8	per box, 2 rolls	5.18	1 5-8	per box, 2 rolls	1.00
1 3-4	per box, 1 roll	3.05	1 3-4	per box, 1 roll	.60
2	per box, 1 roll	3.70	2	per box, 1 roll	.65
2 1-8	per box, 1 roll	3.80	2 1-8	per box, 1 roll	.70
2 3-8	per box, 1 roll	4.20	2 3-8	per box, 1 roll	.80
3 1-4	per box, 1 roll	4.75	3 1-4	per box, 1 roll	.90

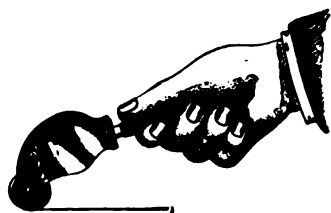
Special sizes made to order. Each width roll contains 67 feet in length of material.



FIG. 1.

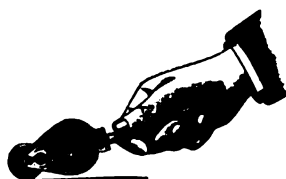
IMPORTANT WHEN ORDERING MATERIAL which is to be used over beads or grooves on outside of cars like Figure 1, the Gold or Aluminum must be 1-8 inch wider than the stripe when finished, as you need the surplus gold on the edges to finish the beads same as if using book gold. For flat surfaces 1-16 wider will do. Specify R. R. material for cars. Send all orders direct to us, which insures its being filled properly.

COE'S No. 1 GILDING WHEEL,
\$3.00 each, net.



Made in all widths up to 5 inches
at \$3.00 each.

COE'S No. 2 GILDING WHEEL,
\$1.00 each, net.



Made in all widths up to 3 1/4
inches at \$1.00 each.

COE'S No. 3 GILDING WHEEL
AND BRUSH.



Widths 3/8, 1/2, 5/8, 3/4, 1 1/8, \$2.50
each net; 1 5/8, \$2.75 each net;
3 1/4, \$3.50 each net.

W. H. COE MANUFACTURING CO., Providence, R. I.
SOLE MANUFACTURERS.

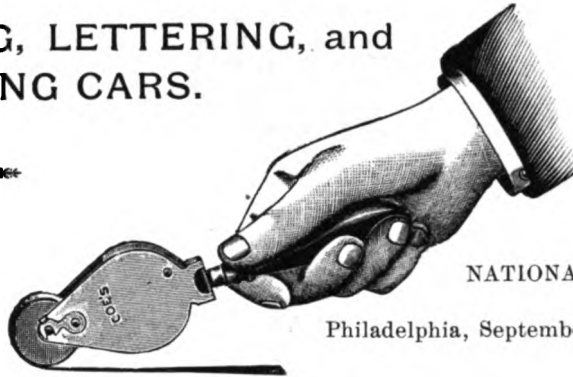
COE'S GILDING WHEELS,

Ribbon Gold and Aluminum Leaf



For STRIPING, LETTERING, and
ORNAMENTING CARS.

Fully protected by
PATENTS
in the United States and
Foreign Countries.



Awarded

FIRST PRIZE
Franklin Institute,

SILVER MEDAL
and Diploma.

NATIONAL EXPORT EXPOSITION,

Philadelphia, September to November, 1899.

**The Cheapest and Quickest Way of
Gilding Known.**

**THIS METHOD OF GILDING REQUIRES NO SKILL TO USE,
SAVES A VAST AMOUNT OF TIME, DOES BETTER
WORK AND DON'T WASTE MATERIAL.**

Adopted by over 250 Railroads and Car Manufacturers in the U. S.,
and many in Foreign Countries.

WE SAVE MONEY FOR OTHERS, WHY NOT YOU?

See Price List on Opposite Page.

Discounts Furnished on Application.

W. H. COE MFG. CO., Providence, R. I., U. S. A.

TOOL STEEL CLASSIFICATION.

ALL DIMENSIONS INCLUSIVE.

ROUND, SQUARE AND OCTAGON.

$\frac{5}{8}$ to 2 in		Base	
	EXTRA PER LB. CTS.		EXTRA PER LB. CTS.
$2\frac{1}{8}$ to 3.	1.0	$\frac{1}{16}$ to $\frac{1}{8}$ in.	0.5
$3\frac{1}{8}$ to 4.	1.5	$\frac{1}{8}$ to $\frac{3}{8}$.	1.0
$4\frac{1}{8}$ to 5.	2.0	$\frac{1}{4}$ and $\frac{1}{2}$.	2.0
$5\frac{1}{8}$ to 6.	2.5	$\frac{3}{4}$ and $1\frac{1}{4}$.	3.0
$6\frac{1}{8}$ to 7.	3.0	$1\frac{1}{2}$.	5.0
$7\frac{1}{8}$ to 8.	3.5	$1\frac{3}{4}$.	10.0
		2 .	18.0

FLAT.

$\frac{5}{8}$ to 2 in. thick x $\frac{1}{8}$ to 2 in. wide		Base	
	EXTRA PER LB. CTS.		EXTRA PER LB. CTS.
$\frac{1}{8}$ x $\frac{1}{8}$.	20.0	$\frac{1}{16}$ x $\frac{3}{8}$ to $\frac{5}{8}$.	1.5
$\frac{1}{8}$ x $\frac{1}{4}$.	15.0	$\frac{1}{8}$ x $\frac{1}{4}$ to 8.	1.0
$\frac{1}{8}$ x $\frac{1}{2}$.	8.0	$\frac{3}{8}$ x $\frac{1}{4}$ to 8.	1.0
$\frac{1}{8}$ x $\frac{3}{8}$.	4.0	$\frac{1}{2}$ x $\frac{1}{2}$ to 8.	1.0
$\frac{1}{8}$ x $\frac{1}{2}$ to $\frac{1}{2}$.	3.0	$\frac{1}{2}$ x $\frac{3}{4}$ to 8.	1.0
$\frac{1}{8}$ x $\frac{3}{4}$ to 7.	2.0	$\frac{3}{4}$ x $\frac{1}{2}$ to 8.	1.0
$\frac{1}{8}$ x $7\frac{1}{8}$ to 8.	3.0	$\frac{1}{2}$ x $2\frac{1}{8}$ to 8.	1.0
$\frac{1}{4}$ x $\frac{1}{4}$.	5.0	$\frac{1}{4}$ to 2 x $\frac{5}{8}$ to 2.	0.0
$\frac{1}{4}$ x $\frac{1}{2}$.	4.0	$\frac{5}{8}$ to 2 x $2\frac{1}{8}$ to 7.	1.0
$\frac{1}{4}$ x $\frac{3}{8}$.	3.0	$\frac{5}{8}$ to $1\frac{3}{4}$ x $7\frac{1}{8}$ to 8.	1.0
$\frac{1}{4}$ x $\frac{1}{2}$ to $\frac{5}{8}$.	2.0	$1\frac{1}{4}$ to 2 x $7\frac{1}{8}$ to 8.	1.5
$\frac{1}{4}$ x $\frac{3}{4}$ to 2.	1.5	$2\frac{1}{8}$ to 3 x $2\frac{1}{8}$ to 5.	1.0
$\frac{1}{4}$ x $2\frac{1}{8}$ to 7.	1.0	$2\frac{1}{8}$ to 3 x $5\frac{1}{8}$ to 8.	1.5
$\frac{1}{4}$ x $7\frac{1}{8}$ to 8.	2.0	$3\frac{1}{8}$ to 4 x $3\frac{1}{8}$ to 6.	1.5
$\frac{3}{4}$ x $\frac{1}{8}$ to $\frac{3}{8}$.	2.0	$3\frac{1}{8}$ to 4 x $6\frac{1}{8}$ to 8.	2.0
$\frac{1}{4}$ x $\frac{1}{2}$ to $\frac{5}{8}$.	1.5	$4\frac{1}{8}$ to 5 x $4\frac{1}{8}$ to 7.	2.0
$\frac{1}{4}$ x $\frac{3}{4}$ to 2.	1.5	$4\frac{1}{8}$ to 5 x $7\frac{1}{8}$ to 8.	2.5
$\frac{1}{4}$ x $2\frac{1}{8}$ to 7.	1.0	$5\frac{1}{8}$ to 6 x $5\frac{1}{8}$ to 8.	2.5
$\frac{1}{4}$ x $7\frac{1}{8}$ to 8.	2.0	$6\frac{1}{8}$ to 7 x $6\frac{1}{8}$ to 7.	3.0
		$6\frac{1}{8}$ to 8 x $7\frac{1}{8}$ to 8.	3.5

Unenumerated sizes at price of the next larger on the list.

CUTTING TO SPECIFIED SINGLE AND MULTIPLE LENGTHS.

24 inches or over.	$\frac{1}{2}$ cent per pound
18 to 24 inches.	1 cent per pound
12 to 18 inches.	$1\frac{1}{2}$ cents per pound
6 to 12 inches.	2 cents per pound

Less than six inches, special price.

The SARGENT COMPANY.

Office, 675 Old Colony Bldg, Chicago, Ill.
Works, 59th and Wallace Sts., Chicago, Ill.
Works, Chicago Heights, Ill.

Open-Hearth Steel Castings.

Cast Steel Knuckles for Repairs.

KNUCKLE CHART.

1 51 lbs. Old style American No. 1	2 50 lbs. (New style) American No. 2	3 51 lbs. Alex	4 60 lbs. Barfield	5 54 lbs. Brown	6 50 lbs. Buckeye No. 2	7 50 lbs. Buckeye No. 3	8 60 lbs. Buckeye No. 4 (Liner Steel)
9 48 lbs. Burns	10 50 lbs. California	11 48 lbs. (New style) Columbia	12 52 lbs. (Old style) Columbia	13 40 lbs. Champion	14 54 lbs. Chicago	15 44 lbs. Detroit No. 2	16 48 lbs. Detroit No. 3
17 50 lbs. Diamond (Old style)	18 54 lbs. Diamond No. 2 (Improved)	19 50 lbs. Downing Pass (Old style Standard)	20 60 lbs. Drexel (Old style)	21 57 lbs. Drexel (Improved)	22 Ewards	23 Empire	24 50 lbs. Eureka
25 41 lbs. Elliot	26 50 lbs. Erie	27 50 lbs. Foreyth	28 47 lbs. Foster	29 50 lbs. Fox	30 50 lbs. Gibson-Brown (Emergency) Freight	31 50 lbs. Gallagher	32 Freight 50 lbs. Pass. 41 Gould
33 50 lbs. Hien No. 1	34 48 lbs. Hien No. 2	35 41 lbs. Hien No. 3 or S. D.	36 50 lbs. Hinson (Truckers)	37 50 lbs. Hinson (Improved)	38 43 lbs. Indurate	39 Freight 50 lbs. Pass. 50 Janney 2 F	40 50 lbs. Janney-Miller
41 50 lbs. Johnson	42 50 lbs. Kling	43 50 lbs. Leeds	44 50 lbs. Little Delaware	45 50 lbs. Long Star	46 50 lbs. Lorraine	47 50 lbs. Ludlow	48 50 lbs. Mather
49 50 lbs. Missouri Pacific No. 2 or Talbot.	50 51 lbs. Murphy No. 3	51 48 lbs. National (Old Style) S	52 47 lbs. National (New Style)	53 50 lbs. National Miller-Swing-Head	54 51 lbs. New York	55 50 lbs. Pacific	56 48 lbs. Peartree
57 40 lbs. Perfected	58 50 lbs. Pooley	59 51 lbs. R. H. & H. Schaefer Harrison & Howard	60 43 lbs. Smillie (Old style)	61 50 lbs. Smillie (Improved)	62 50 lbs. Smith-Safety	63 40 lbs. No. 1 Solid	64 51 lbs. Standard (Old style)
65 50 lbs. St. Louis	66 50 lbs. Taylor	67 50 lbs. Thurmond (Passenger)	68 50 lbs. Thurmond (Freight)	69 50 lbs. Tower	70 43 lbs. Trojan	71 50 lbs. Van Dorstan	72 51 lbs. Washburn 1907
73 40 lbs. Washburn 1907 A	74 48 lbs. Williams B C	75 43 lbs. Williams No. 4	76 47 lbs. Williams No. 4 B	77 40 lbs. Williams No. 4 C	78 50 lbs. Williams (Passenger)	79 50 lbs. Marion	80

PROMPT SHIPMENTS FROM STOCK.

AGENCIES.

St. Paul, Minn., 130 Endicott Arcade; St. Louis, Mo., 403 Security Building; Omaha, Neb., U. S. National Bank Building; San Francisco, Cal., 49 Wells Fargo Building; New York, Havemeyer Building; Pittsburg and Montreal.

PRICE LIST OF GALVANIZED SHEET IRON.

Gauge number.....	14	16	18	19	20	21	22	23	24	25	26	27	28	30
Price, per pound.....	.12	.12	.13	.13	.13	.13	.14	.14	.14	.15	.15	.16	.17	.21

Standard widths, 24 to 32 inches, inclusive.

36 to 40 inches wide, 1c. per pound extra.

WEIGHT OF SHEET IRON.

Gauge.....		10	11	12	13	14	15	16	17	18	19	20	
Weight per square foot, lbs.:	{	Black.....	5.63	5	4.38	3.75	3.13	2.81	2.5	2.25	2.	1.75	1.50
		Galvanized....	5.78	5.15	4.53	3.90	3.28	2.96	2.65	2.40	2.15	1.90	1.65
Thickness, inches.....		.141	.125	.109	.094	.078	.07	.063	.056	.05	.044	.038	
Gauge.....			21	22	23	24	25	26	27	28	29	30	
Weight per square foot, lbs.:	{	Black.....	1.38	1.25	1.13	1.	.88	.75	.69	.63	.56	.5	
		Galvanized.....	1.53	1.40	1.28	1.15	1.03	.90	.84	.78	.72	.65	
Thickness, inches.....			.034	.031	.028	.025	.022	.019	.017	.016	.014	.013	



“JUNIATA”

GALVANIZED · SHEETS

MANUFACTURED BY

The Cincinnati Corrugating Co.

PIQUA, OHIO.

We also manufacture—

Black Iron and Steel Sheets.

Corrugated Iron Roofing.

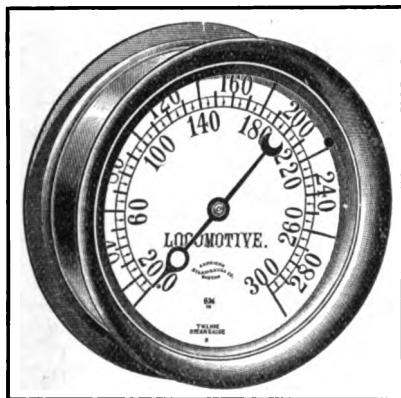
Standing Seam Steel Roofing.

Iron Shutters and Doors.

Eave Trough and Conductor Pipe.

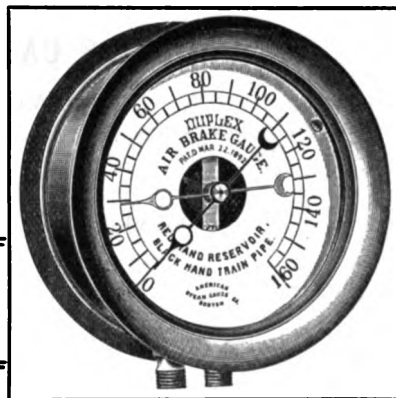
Roofing Terne Plate.

 **Also CAR ROOFING.** 



**The New Improved
AMERICAN
Locomotive Gauge.**

**The Improved
AMERICAN
Loco. Duplex Gauge.**



**American Locomotive Muffler.
Pop Safety Valves.**

American Steam Gauge Company,

JAMAICA PLAIN,

NEW YORK.

BOSTON, MASS.

CHICAGO.

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

SWEDES IRON PLIABLE HOISTING ROPES.

19 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 Pounds.	Diameter of Hemp Rope of Equal Strength.	Proper Working Load in Tons of 2,000 Pounds.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
1/4 inch	6 1/2	1.20	1 1/8	1 1/4	.10	1 1/2
5/16 inch	6 3/4	1.70	1 1/8	1 3/8	.15	2 1/2
3/8 inch	7	2.50	1 7/8	1 7/8	.22	1
7/16 inch	7 1/2	3.40	1	1 5/8	.30	1 1/2
1/2 inch	8	4.40	1 1/8	1 7/8	.39	1 3/4
5/8 inch	10	5.50	1 1/4	1 10/16	.50	2
3/4 inch	12	6.80	1 1/2	1 11/16	.64	2 1/2
7/8 inch	16	9.70	1 5/8	1 7/8	.89	3
1 inch	20	13.	2	2	1.20	3 1/2
1 1/8 inch	26	17.	2 1/4	3	1.58	4
1 1/4 inch	33	21.	2 5/8	4	2.00	4 1/2
1 3/8 inch	40	25.	3 1/4	5	2.45	5
1 1/2 inch	48	31.	3 1/2	6 1/4	3.00	6
1 5/8 inch	57	36.	3 3/4	7	3.55	6 1/2
1 3/4 inch	63	42.	4	8	4.15	7
1 7/8 inch	80	48.	4 1/4	9	5.25	7 1/2
2 inch	92	62.	4 3/4	12	6.30	9
2 1/4 inch	117	78.	5 1/2	15	8.00	10

When made with Wire Center, the price per foot is ten per cent. extra.

CRUCIBLE CAST STEEL PLIABLE HOISTING ROPES.

19 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 Pounds.	Diameter of Hemp Rope of Equal Strength.	Proper Working Load in Tons of 2,000 Pounds.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
1/4 inch	9	2.50	3/4	1 1/2	.10	3/4
5/16 inch	9 1/4	3.50	1	1 3/4	.15	1
3/8 inch	9 1/2	5.	1 1/8	1	.22	1 1/2
7/16 inch	10	7.	1 1/4	1 1/8	.30	2
1/2 inch	11	9.	1 1/2	1 1/4	.39	2 1/4
5/8 inch	12	11.	1 5/8	2 1/4	.50	2 3/4
3/4 inch	14	14.	1 3/4	2 1/2	.64	3 1/2
7/8 inch	18	20.	2 1/8	4	.89	4
1 inch	23	26.	2 5/8	5 1/4	1.20	4 1/2
1 1/8 inch	30	34.	3	6 3/4	1.58	5 1/4
1 1/4 inch	38	42.	3 3/8	8	2.00	6
1 3/8 inch	46	52.	3 3/4	10	2.45	6 1/2
1 1/2 inch	56	63.	4	12	3.00	7
1 5/8 inch	66	77.	4 1/4	15	3.55	7 1/2
1 3/4 inch	74	86.	4 3/4	17	4.15	8 1/2
1 7/8 inch	83	106.	5 1/4	20	5.25	10
2 inch	111	125.	.....	25	6.30	12
2 1/4 inch	142	160.	.....	32	8.00	13

When made with Wire Center, the price per foot is ten per cent. extra.

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

SWEDES IRON TRANSMISSION OR HAULAGE ROPES.

7 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 Pounds.	Proper Working Load in Tons of 2,000 Pounds.	These Ropes are principally used for Derricks, Guys, Steamboat Rigging, Ferrises, Transmission of Power, etc.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
$\frac{3}{8}$ inch	31 $\frac{1}{4}$	1.4	1 $\frac{1}{4}$		.12 $\frac{1}{2}$	1 $\frac{1}{2}$
$\frac{7}{16}$ inch	33 $\frac{1}{4}$	1.7	1 $\frac{3}{8}$		.15	1 $\frac{3}{4}$
$\frac{1}{2}$ inch	41 $\frac{1}{2}$	2.4	1 $\frac{1}{2}$		.22	2
$\frac{5}{8}$ inch	51 $\frac{1}{2}$	3.3	1 $\frac{3}{8}$		.30	2 $\frac{1}{4}$
$\frac{3}{4}$ inch	61 $\frac{1}{2}$	4.2	1 $\frac{5}{8}$		.39	2 $\frac{3}{4}$
$\frac{7}{8}$ inch	8	5.3	1		.50	3
1 inch	10	6.6	1 $\frac{3}{8}$		.64	3 $\frac{1}{2}$
1 $\frac{1}{8}$ inch	12	7.9	1 $\frac{1}{2}$		.75	4
1 $\frac{1}{4}$ inch	14	9.3	1 $\frac{7}{8}$		.89	4 $\frac{1}{2}$
1 $\frac{3}{8}$ inch	17 $\frac{1}{2}$	12.	2 $\frac{1}{8}$		1.20	5
1 $\frac{1}{2}$ inch	23	16.	3 $\frac{1}{8}$		1.58	5 $\frac{1}{4}$
1 $\frac{3}{4}$ inch	29	20.	4		2.00	6 $\frac{1}{4}$
1 $\frac{7}{8}$ inch	36	24.	4 $\frac{1}{2}$		2.45	7 $\frac{1}{4}$
2 inch	43	29.	5 $\frac{1}{2}$		3.00	8
2 $\frac{1}{8}$ inch	51	34.	7		3.55	8 $\frac{1}{2}$

When made with Wire Center, the price per foot is ten per cent. extra.

HOISTING ROPES.

19 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Breaking Strain in Tons of 2,000 Pounds.	Proper Working Load in Tons of 2,000 Pounds.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
$\frac{3}{8}$ inch	14	8	1 $\frac{1}{4}$	.22	2
$\frac{7}{16}$ inch	15	10	1 $\frac{3}{4}$	.30	2 $\frac{1}{2}$
$\frac{1}{2}$ inch	17	13	2	.39	2 $\frac{3}{4}$
$\frac{5}{8}$ inch	19	15	2 $\frac{1}{2}$	.50	3
$\frac{3}{4}$ inch	22	20	3 $\frac{1}{2}$	.64	4
$\frac{7}{8}$ inch	28	30	5	.89	5
1 inch	35	40	6 $\frac{1}{2}$	1.20	6
1 $\frac{1}{8}$ inch	45	50	8 $\frac{1}{2}$	1.58	7
1 $\frac{1}{4}$ inch	54	63	11	2.00	8
1 $\frac{3}{8}$ inch	65	76	13	2.45	9
1 $\frac{1}{2}$ inch	80	95	16	3.00	10
1 $\frac{3}{4}$ inch	95	115	19	3.55	11
1 $\frac{7}{8}$ inch	112	130	22	4.15	12
2 inch	136	160	25	5.25	13
2 $\frac{1}{8}$ inch	160	220	33	6.30	14
2 $\frac{1}{4}$ inch	220	235	40	8.00	15

7 Wires to the Strand. Hemp Center.

$\frac{1}{2}$ inch	12 $\frac{1}{2}$	11	2	.39	3
$\frac{5}{8}$ inch	15	14	2 $\frac{1}{2}$	.50	4
$\frac{3}{4}$ inch	18	18	3	.64	5 $\frac{1}{2}$
$\frac{7}{8}$ inch	25	28	5	.89	6
1 inch	33	36	7	1.20	7
1 $\frac{1}{8}$ inch	42	48	9 $\frac{1}{2}$	1.58	8
1 $\frac{1}{4}$ inch	53	60	11	2.00	9
1 $\frac{3}{8}$ inch	64	72	13	2.45	10
1 $\frac{1}{2}$ inch	76	82	16	3.00	11
1 $\frac{3}{4}$ inch	92	100	20	3.55	12

When made with Wire Center, the price per foot is ten per cent. extra.

CRUCIBLE CAST STEEL TRANSMISSION OR HAULAGE ROPES.

7 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 Pounds.	Proper Working Load in Tons of 2,000 Pounds.	These Ropes are principally used for Derricks, Guys, Steamboat Rigging, Ferries, Transmission of Power, etc., etc.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
$\frac{1}{8}$ inch.	4	$2\frac{3}{4}$	$\frac{1}{2}$		.12 $\frac{1}{2}$	$2\frac{1}{4}$
$\frac{1}{4}$ inch.	$4\frac{1}{2}$	$3\frac{1}{2}$	$\frac{3}{4}$		.15	$2\frac{1}{2}$
$\frac{3}{8}$ inch.	$5\frac{1}{2}$	5	1		.22	$2\frac{3}{4}$
$\frac{1}{2}$ inch.	$6\frac{1}{2}$	$6\frac{1}{2}$	$1\frac{1}{4}$		.30	$3\frac{1}{4}$
$\frac{5}{8}$ inch.	$7\frac{1}{2}$	$8\frac{1}{2}$	$1\frac{3}{4}$		.39	4
$\frac{3}{4}$ inch.	9	$10\frac{1}{2}$	2		.50	$4\frac{1}{2}$
$\frac{7}{8}$ inch.	11	13	$2\frac{1}{2}$		.64	$5\frac{1}{4}$
1 inch.	$13\frac{1}{2}$	16	3		.75	6
$1\frac{1}{8}$ inch.	16	19	$3\frac{3}{4}$		.89	$6\frac{3}{4}$
$1\frac{1}{4}$ inch.	22	24	5		1.20	$7\frac{1}{2}$
$1\frac{3}{8}$ inch.	28	32	$6\frac{1}{2}$		1.58	$8\frac{1}{2}$
$1\frac{1}{2}$ inch.	36	40	8		2.00	$9\frac{1}{2}$
$1\frac{3}{4}$ inch.	43	48	10		2.45	$10\frac{3}{4}$
$1\frac{7}{8}$ inch.	51	58	12		3.00	12
2 inch.	60	68	14		3.55	13

When made with Wire Center, the price per foot is ten per cent. extra.

HOISTING ROPES.

19 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 pounds.	Proper Working Load in Tons of 2,000 Pounds.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Feet.
$\frac{1}{4}$ inch.	$10\frac{1}{2}$	$2\frac{3}{4}$	$\frac{1}{2}$	.10	$\frac{3}{4}$
$\frac{1}{2}$ inch.	$10\frac{3}{4}$	4	$\frac{3}{4}$	.15	1
$\frac{3}{8}$ inch.	11	6	1	.22	$1\frac{1}{2}$
$\frac{1}{2}$ inch.	$11\frac{1}{2}$	8	$1\frac{1}{2}$	.30	2
$\frac{5}{8}$ inch.	$12\frac{1}{2}$	10	2	.39	$2\frac{1}{4}$
$\frac{3}{4}$ inch.	14	12	$2\frac{1}{4}$	.50	$2\frac{3}{4}$
$\frac{7}{8}$ inch.	17	16	3	.64	$3\frac{1}{2}$
1 inch.	21	22	$4\frac{1}{4}$	.89	4
$1\frac{1}{8}$ inch.	27	30	6	1.20	$4\frac{1}{2}$
$1\frac{1}{4}$ inch.	35	40	$7\frac{1}{2}$	1.58	$5\frac{1}{4}$
$1\frac{3}{8}$ inch.	44	50	$9\frac{1}{2}$	2.00	6
$1\frac{1}{2}$ inch.	54	58	11	2.45	$6\frac{1}{2}$
$1\frac{3}{4}$ inch.	65	72	14	3.00	7
$1\frac{7}{8}$ inch.	78	85	16	3.55	$7\frac{1}{2}$
2 inch.	90	97	19	4.15	$8\frac{1}{2}$
$2\frac{1}{4}$ inch.	112	117	22	5.25	10
$2\frac{1}{2}$ inch.	130	144	28	6.80	12
$2\frac{3}{4}$ inch.	165	182	36	8.00	13

When made with Wire Center, the price per foot is ten per cent. extra.

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

HAULAGE AND TRANSMISSION ROPES.

7 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approximate Breaking Strain in Tons of 2,000 pounds.	Proper Working Load in Tons of 2,000 pounds.	Average Weight per Foot.	Minimum Size of Drums or Sheaves in Ft.
$\frac{3}{8}$ inch.....	6 $\frac{1}{2}$	5 $\frac{1}{2}$	1	.22	2 $\frac{3}{4}$
$\frac{7}{16}$ inch.....	8	7 $\frac{1}{2}$	1 $\frac{1}{2}$	.30	3 $\frac{1}{4}$
$\frac{1}{2}$ inch.....	9	9 $\frac{3}{4}$	1 $\frac{3}{4}$	.39	4
$\frac{9}{16}$ inch.....	11	12	2 $\frac{1}{4}$	.50	4 $\frac{1}{2}$
$\frac{5}{8}$ inch.....	13	15	3	.64	5 $\frac{1}{4}$
$\frac{3}{4}$ inch.....	18	21	4	.89	6 $\frac{3}{4}$
$\frac{7}{8}$ inch.....	25	28	5 $\frac{1}{2}$	1.20	7 $\frac{1}{4}$
1 inch.....	33	37	7	1.58	8 $\frac{1}{2}$
1 $\frac{1}{8}$ inch.....	43	46	9	2.00	9 $\frac{1}{2}$
1 $\frac{1}{4}$ inch.....	51	56	11	2.45	10 $\frac{1}{2}$
1 $\frac{3}{8}$ inch.....		68	13	3.00	12
1 $\frac{1}{2}$ inch.....		80	15	3.55	13

When made with Wire Center, the price per foot is ten per cent. extra.

TILLER ROPES.

DIAMETER.	SWEDES IRON. Price per Foot.	CAST STEEL. Price per Foot.	Average weight of Rope per Foot.
$\frac{1}{4}$ inch.....	7 $\frac{1}{2}$	11	.07
$\frac{5}{16}$ inch.....	8	12 $\frac{1}{2}$	.11
$\frac{3}{8}$ inch.....	9	14	.16
$\frac{7}{16}$ inch.....	10	15	.21
$\frac{1}{2}$ inch.....	11	17	.28
$\frac{5}{8}$ inch.....	14	19	.35
$\frac{3}{4}$ inch.....	17	24	.43
$\frac{7}{8}$ inch.....	22	30	.62
1 inch.....	27	36	.84
1 $\frac{1}{8}$ inch.....	33	43	1.10

WIRE SASH AND BELL CORDS.

Copper, Iron, Tinned and Galvanized.

Trade Number.	DIAMETER.	PRICE PER FOOT IN CENTS.			WEIGHT PER FOOT IN POUNDS.		BREAKING STRAIN IN POUNDS.	
		Swedes Iron.	Tinned or Galvanized.	Copper.	Iron.	Copper.	Iron.	Copper.
26	$\frac{1}{4}$ inch.....	3	4	9	.100	.115	2200	1280
27	$\frac{5}{16}$ inch.....	2 $\frac{3}{4}$	3 $\frac{1}{2}$	7 $\frac{1}{2}$	.076	.087	1850	1020
27 $\frac{1}{2}$	$\frac{3}{8}$ inch.....	2 $\frac{1}{4}$	3	6	.056	.064	1450	790
28	$\frac{7}{16}$ inch.....	1 $\frac{3}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{2}$	.025	.029	800	435
28 $\frac{1}{2}$	$\frac{1}{2}$ inch.....	1 $\frac{1}{2}$	2	3 $\frac{1}{2}$	.014	.016	500	270
29	$\frac{5}{8}$ inch.....	1 $\frac{1}{4}$	1 $\frac{3}{4}$	3	.006	.007	280	140

The wire cords specified in the above table are composed of six strands of seven wires each, laid around a cotton heart.

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

PLOUGH STEEL HOISTING ROPE.

19 Wires to the Strand. Hemp Center.

DIAMETER.	Price per Foot in Cents.	Approx'ate Breaking Strain in Tons of 2,000 lbs.	Proper Working Load in Tons of 2,000 lbs.	Average Weight per Foot.	Minimum size of Drums or Sheaves in Ft.
$\frac{1}{4}$ inch.....	12	3	$\frac{1}{2}$	.10	1
$\frac{3}{8}$ inch.....	12 $\frac{1}{2}$	4 $\frac{1}{2}$	1	.15	1 $\frac{1}{2}$
$\frac{1}{2}$ inch.....	12 $\frac{1}{2}$	6 $\frac{1}{2}$	1 $\frac{1}{2}$	.22	2
$\frac{5}{8}$ inch.....	13	8 $\frac{1}{2}$	1 $\frac{3}{4}$	.30	2 $\frac{1}{2}$
$\frac{3}{4}$ inch.....	14	11 $\frac{1}{2}$	2 $\frac{1}{4}$	.39	2 $\frac{3}{4}$
$\frac{7}{8}$ inch.....	16	14 $\frac{1}{2}$	2 $\frac{3}{4}$	.50	3
1 inch.....	19	18	3 $\frac{1}{2}$	.64	4
1 $\frac{1}{8}$ inch.....	26	25	5	.89	5
1 $\frac{1}{4}$ inch.....	34	34	6 $\frac{1}{2}$	1.20	6
1 $\frac{3}{8}$ inch.....	43	44	8 $\frac{1}{2}$	1.58	7
1 $\frac{1}{2}$ inch.....	52	56	11 $\frac{1}{2}$	2.00	8
1 $\frac{3}{4}$ inch.....	63	67	13 $\frac{1}{2}$	2.45	9
1 $\frac{7}{8}$ inch.....	77	82	16	3.00	10
1 $\frac{1}{2}$ inch.....	93	96	19	3.55	11
1 $\frac{5}{8}$ inch.....	108	111	22	4.15	12
1 $\frac{3}{4}$ inch.....	135	128	25 $\frac{1}{2}$	5.25	13
2 inch.....	156	165	33	6.30	14
2 $\frac{1}{4}$ inch.....	200	208	41	8.00	15

7 Wires to the Strand. Hemp Center.

$\frac{3}{8}$ inch.....	5 $\frac{1}{2}$	8 $\frac{1}{2}$	$\frac{3}{4}$	.12 $\frac{1}{2}$	1
$\frac{1}{2}$ inch.....	6	4 $\frac{1}{4}$	$\frac{7}{8}$	.15	1 $\frac{1}{2}$
$\frac{5}{8}$ inch.....	6 $\frac{1}{2}$	6 $\frac{1}{4}$	1 $\frac{1}{4}$	.22	2
$\frac{3}{4}$ inch.....	8	8 $\frac{1}{2}$	1 $\frac{3}{4}$	.30	3
$\frac{7}{8}$ inch.....	11	11	2 $\frac{1}{4}$	.39	3
1 inch.....	14	14	2 $\frac{3}{4}$	.50	4
1 $\frac{1}{8}$ inch.....	17	17	3 $\frac{1}{4}$	.64	5
1 $\frac{1}{4}$ inch.....	20	21	4 $\frac{1}{4}$	.75	5 $\frac{1}{2}$
1 $\frac{3}{8}$ inch.....	25	24	4 $\frac{3}{4}$	.89	6
1 $\frac{1}{2}$ inch.....	32	32	6 $\frac{1}{4}$	1.20	7
1 $\frac{3}{4}$ inch.....	41	42	8 $\frac{1}{4}$	1.58	8
1 $\frac{7}{8}$ inch.....	51	53	10 $\frac{1}{2}$	2.00	9
1 $\frac{1}{2}$ inch.....	61	64	12 $\frac{3}{4}$	2.45	10
1 $\frac{3}{8}$ inch.....	75	78	15 $\frac{1}{2}$	3.00	11
1 $\frac{1}{2}$ inch.....	90	91	18 $\frac{1}{4}$	3.55	12

When made with Wire Center, the price per foot is ten per cent. extra.

GALVANIZED IRON AND CAST-STEEL COMPOUND RUNNING ROPE.

Composed of 6 Strands and a Hemp Center. Each Strand consisting of 12 Wires and a Hemp Core.

Circumference in inches.	DIAMETER.	Price per foot in Cents.		Weight per foot in pounds.	Approximate Breaking Strain in tons of 2,000 pounds.	
		Iron.	Cast-Steel.		Iron.	Cast-Steel.
$3\frac{1}{4}$	1 $\frac{1}{8}$ inch.....	22	30	1.14	12.0	24.0
3	1 inch.....	20	27	0.97	10.7	21.5
2 $\frac{3}{4}$	$\frac{7}{8}$ inch.....	17	23	0.81	8.21	16.4
2 $\frac{1}{2}$	$\frac{3}{4}$ inch.....	14 $\frac{1}{2}$	19	0.67	7.20	14.4
2 $\frac{1}{4}$	$\frac{5}{8}$ inch.....	11 $\frac{1}{2}$	15	0.54	6.13	12.3
2	$\frac{1}{2}$ inch.....	09	12	0.43	4.29	8.58
1 $\frac{3}{4}$	$\frac{3}{4}$ inch.....	08	10	0.33	3.47	6.94
1 $\frac{1}{2}$	$\frac{1}{2}$ inch.....	07	09	0.24	2.78	5.56
1 $\frac{1}{4}$	$\frac{1}{4}$ inch.....	06 $\frac{1}{2}$	08 $\frac{1}{2}$	0.17	2.15	4.30
1 $\frac{1}{8}$	$\frac{1}{8}$ inch.....	06	07 $\frac{3}{4}$			
1	$\frac{1}{8}$ inch.....	05 $\frac{1}{2}$	07	0.11	1.14	2.28

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

GALVANIZED "CHARCOAL" IRON WIRE ROPES.

For Ships' Rigging, Stays, Guys, Etc.

DIAMETER.	Circumference in inches.	7 WIRES COARSE LAID. Price per Foot.	12 Wires Fine Laid. Price per Foot.	Weight per Foot in pounds.	Breaking Strain in Tons of 2,000 Pounds.	Circumference of Hemp Rope. Equal Strength. Inches.
1 3/4 inch.	5 1/2	44	48	4.85	44.	11
1 1/4 inch.	5 1/4	41	43	4.40	40.	10 1/2
1 5/8 inch.	5	38	40	4.00	36.	10
1 1/2 inch.	4 3/4	35	37	3.60	32.	9 1/2
1 7/8 inch.	4 1/2	31	33	3.25	29.	9
1 3/8 inch.	4 1/4	27	29	2.90	26.	8 1/2
1 1/4 inch.	4	24	25	2.55	23.	8
1 1/8 inch.	3 3/4	21	22	2.25	20.	7 1/2
1 1/8 inch.	3 1/2	18	19	1.95	18.	7
1 1/8 inch.	3 1/4	16	17	1.70	15.	6 1/2
1 1/8 inch.	3	14	15	1.44	13.	6
7/8 inch.	2 3/4	12		1.21	11.	5 1/2
1 1/8 inch.	2 1/2	10		1.00	9.	5
3/4 inch.	2 1/4	9		.81	7.3	4 1/2
5/8 inch.	2	8		.64	5.8	4 1/4
1/2 inch.	1 3/4	7		.49	4.4	4
7/8 inch.	1 1/2	6		.86	3.2	3 1/2
1/2 inch.	1 1/4	5		.25	2.3	3
3/8 inch.	1 1/8	4		.20	1.8	2 5/8
1/2 inch.	1	3 1/2		.16	1.4	2 1/2
3/8 inch.	7/8	3		.123	1.1	2
1/4 inch.	3/4	2 1/2	} 5 strands, 7 wires each.	.090	0.81	1 1/2
3/8 inch.	5/8	2 1/4		.063	0.56	1 1/4
1/8 inch.	1/2	2		.040	0.36	1 1/8

GALVANIZED CAST-STEEL YACHT RIGGING.

Composed of 6 Strands and a Hemp Center. 7 or 19 Wires to the Strand.

Circumference in inches.	DIAMETER.	Price per foot in Cents.		Weight per foot in pounds.	Approximate Breaking Strain in Tons of 2,000 pounds.	Circumference in inches of New Manila Rope of Equal Strength.
		19 Wires to Strand.	7 Wires to Strand.			
4	1 1/4 inch.	50	48	2.55	53	13
3 3/4	1 1/8 inch.	46	44	2.25	47	12
3 1/2	1 1/8 inch.	42	40	1.95	41	11
3 1/4	1 1/8 inch.	38	36	1.70	36	10
3	1 inch.	33	31	1.44	31	9
2 3/4	7/8 inch.	28	25	1.21	26	8 1/2
2 1/2	3/4 inch.	23	21	1.00	22	8
2 1/4	3/4 inch.	20	18	0.81	17.6	7
2	5/8 inch.	16	12	0.64	14.0	6
1 3/4	1/2 inch.	13 1/2	10	0.49	10.8	5 1/4
1 1/2	1/2 inch.	12	08 1/2	0.36	8.1	4 3/4
1 3/8	1 1/8 inch.	11 1/2	08	0.30	6.8	4 1/2
1 1/4	7/8 inch.	11	07 1/2	0.25	5.7	4 1/4
1 1/8	3/4 inch.	10 1/2	06 1/4			
1	1/2 inch.	10	05	0.16	3.7	3

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

GALVANIZED STRAND OR GUY ROD.

For Guys, Signal Cord, Fencing and Electric Light Plants.

APPROXIMATE DIAMETER.	Weight per 100 feet. Pounds.	Strength. Pounds.	Price per 100 feet.
$\frac{1}{2}$ inch	52	8320	\$3 15
$\frac{7}{8}$ inch	40	6000	2 50
$\frac{3}{8}$ inch	30	4700	2 00
$\frac{1}{2}$ inch	22	3300	1 60
$\frac{3}{4}$ inch	13	1750	1 15
$\frac{1}{2}$ inch	8	1000	80
$\frac{3}{8}$ inch	5	700	60
$\frac{1}{4}$ inch	$3\frac{1}{2}$	375	45
$\frac{3}{16}$ inch	$2\frac{1}{4}$	320	35

GALVANIZED MAST IRON ROPE.

Diameter	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$
Per foot.	5	$3\frac{1}{2}$	$2\frac{3}{4}$

SEIZING STUFF.

Made From Best Charcoal Wire.

Seven Wires, No	18	19	20	21
Weight per 100 feet.	4	8	$2\frac{1}{4}$	2
Price per 100 feet.	\$0 55	\$0 45	\$0 40	\$0 35

GALVANIZED STEEL HAWSERS.

Composed of Six Strands and a Hemp Center, Each Strand Consisting of 12 Wires and a Hemp Core.

CIRCUMFERENCE.	DIAMETER.	Price per foot in cents.	Weight per foot in pounds	Approximate breaking strain in tons of 2,000 pounds.	Circumference in inches of new manila hawser of equal strength.
$5\frac{1}{2}$ inch	$1\frac{3}{4}$ inch	85	3.25	61.	$13\frac{1}{2}$
$5\frac{1}{4}$ inch	$1\frac{1}{2}$ inch	72	2.95	57.	13
5 inch	$1\frac{1}{8}$ inch	62	2.70	53.	$12\frac{1}{2}$
$4\frac{3}{4}$ inch	$1\frac{1}{2}$ inch	56	2.42	45.	12
$4\frac{1}{2}$ inch	$1\frac{1}{8}$ inch	50	2.18	42.	$11\frac{1}{2}$
$4\frac{1}{4}$ inch	$1\frac{1}{8}$ inch	45	1.94	39.	11
4 inch	$1\frac{1}{4}$ inch	40	1.72	32.	10
$3\frac{3}{4}$ inch	$1\frac{1}{8}$ inch	36	1.51	29.	$9\frac{1}{4}$
$3\frac{1}{2}$ inch	$1\frac{1}{8}$ inch	33	1.32	27.	$8\frac{3}{4}$
$3\frac{1}{4}$ inch	$1\frac{1}{8}$ inch	30	1.14	24.	$8\frac{1}{2}$
3 inch	1 inch	27	.97	21.5	8
$2\frac{3}{4}$ inch	$\frac{7}{8}$ inch	23	.81	16.4	$6\frac{1}{2}$
$2\frac{1}{2}$ inch	$\frac{3}{4}$ inch	19	.67	14.4	6
$2\frac{1}{4}$ inch	$\frac{3}{4}$ inch	15	.54	12.8	$5\frac{1}{2}$

Standard Price-List Wire Rope, Furnished by Broderick & Bascom Rope Co.

GALVANIZED STEEL HAWSERS.

Composed of 6 Strands and a Hemp Center, 37 Wires To the Strand.

CIRCUMFERENCE.	DIAMETER.	Price per foot in cents.	Weight per foot in pounds.	APPROXIMATE BREAKING STRAIN IN TONS OF 2,000 POUNDS.	
				Cast Steel.	Special.
6¼ inch	2 inch .....	.....	6.25	128	166
5½ inch	1¾ inch .....	.....	4.85	101	131
5 inch	1½ inch .....	.....	4.00	84	109
4¾ inch	1½ inch .....	.....	3.60	76	99
4¼ inch	1½ inch .....	.....	2.90	62	81
4 inch	1¼ inch .....	.....	2.55	55	72
3½ inch	1½ inch .....	.....	1.95	42	55
3 inch	1 inch .....	.....	1.44	31	40

CRUCIBLE CAST STEEL WIRE SWITCH ROPES.

LENGTH 30 FEET COMPLETE INCLUDING HOOK AND LINK.	Price each.	Breaking strain in tons of 2,000 pounds.	Diameter of manila rope of equal strength	Weight of Wire Switch Rope, 30 feet complete.	Weight of Manila Switch Rope, 30 feet complete.
1 inch diameter	19 50	34	3	75	175
1½ inch diameter	24 00	42	3¾	90	200
1¾ inch diameter	28 50	52	3¾	100	260

PATENT STEEL WIRE SWITCH ROPES.

1 inch diameter	21 00	40	3¼	75	190
1½ inch diameter	25 80	50	3¾	90	260
1¾ inch diameter	30 90	58	4	100	290

BESSEMER STEEL WIRE SWITCH ROPES.

1 inch diameter	16 55	17	2¼	75	110
1½ inch diameter	20 25	21	2¾	90	150
1¾ inch diameter	23 70	25	3½	100	195

WATER HOSE.

INTERIOR DIAMETER.	Conducting Hose. 3-PLY. Per Foot.	Hydrant Hose. 3-PLY. Per Foot.	Engine Hose. 4-PLY. Per Foot.	Engine Hose. 6-PLY. Per Foot.
$\frac{1}{2}$ inch.....	.20	.25	.30	.37
$\frac{3}{4}$ inch.....	.25	.30	.37	.46
1 inch.....	.33	.40	.50	.62
$1\frac{1}{4}$ inch.....	.42	.50	.62	.77
$1\frac{1}{2}$ inch.....	.50	.60	.75	.93
$1\frac{3}{4}$ inch.....	.58	.70	.87	1.08
2 inch.....	.66	.80	1.00	1.25
$2\frac{1}{4}$ inch.....	.75	.90	1.12	1.40
$2\frac{1}{2}$ inch.....	.83	1.00	1.25	1.56
$2\frac{3}{4}$ inch.....	.92	1.10	1.37	1.71
3 inch.....	.99	1.20	1.50	1.87
4 inch.....	1.32	1.60	2.00	2.50
5 inch.....	1.65			
6 inch.....	1.98			
7 inch.....	2.31			
8 inch.....	2.64			
9 inch.....	2.97			
10 inch.....	3.33			

Tank Hose for R. R.

All intermediate sizes will be charged at the list price of the next larger size. Thus $\frac{7}{8}$ -inch will be charged at 1-inch price, etc. Five and 6-ply hose made at an advance of 25 and 50 per cent. respectively, on 4-ply prices.

STEAM HOSE.

INTERIOR DIAMETER.	3-PLY. For 20 Lbs. Steam or Less. Per Foot.	4-PLY. For 35 Lbs. Steam or Less. Per Foot.	5-PLY. For 50 Lbs. Steam or Less. Per Foot.	6-PLY. For 75 Lbs. Steam or Less. Per Foot.
$\frac{1}{2}$ inch.....	.43	.51	.63	.76
$\frac{3}{4}$ inch.....	.51	.67	.83	1.00
1 inch.....	.67	.83	1.03	1.24
$1\frac{1}{4}$ inch.....	.85	1.04	1.30	1.56
$1\frac{1}{2}$ inch.....	1.02	1.25	1.56	1.87
$1\frac{3}{4}$ inch.....	1.18	1.45	1.81	2.17
2 inch.....	1.34	1.66	2.07	2.49
$2\frac{1}{4}$ inch.....	1.50	1.87	2.33	2.80
$2\frac{1}{2}$ inch.....	1.66	2.08	2.60	3.12
3 inch.....	2.00	2.80	3.50	4.20

To obtain price on higher plies than given, add to the price given for 4-ply 25 per cent. for each additional ply.

United and Globe Rubber Mfg. Cos.

Of TRENTON, N. J.

Manufacturers of _____

Mechanical Rubber Goods for Railway Use.

AIR BRAKE, SIGNAL AND CONDUCTING HOSE,

Under the following Trade-Marks:

“M. C. B.”

“SAFETY.”

“GLOBE.”

Charles Scott Spring Company,

Germantown Avenue, New Market and Hancock Sts.,
PHILADELPHIA, PENN.

MANUFACTURERS OF . . .

HELICAL AND ELLIPTICAL SPRINGS

**For Locomotive, Freight Car, Passenger Coach
and Every Variety of Railroad Service.**

ST. LOUIS,
Union Trust Bldg.

CHICAGO,
Fisher Bldg.

CLEVELAND,
Cuyahoga Bldg.

ESTABLISHED 1810.

N. & G. TAYLOR CO.
PHILADELPHIA.

MANUFACTURERS OF . . .

Tin and Roofing Plates, Solder, Babbitts, Stereotype Metal, Etc.

.. DEALERS IN ..

RAILROAD SUPPLIES.

Pig Tin, Pig Lead, Ingot Copper, Spelter, Antimony, Bismuth, Zinc, Solder, Ventilators, Metal Tiles, Metal Shingles, Spanish Shingles, Tinners' Tools and Machines, Sheet Copper, Sheet Zinc, Sheet Iron, Black and Galvanized, Plain and Corrugated; Imported Russia Iron, Planished Jacket Iron, Polished Steel Sheets, Roofing Nails, Wire, Rivets, Roofing Paint, Sheathing Paper.

Send For Catalogue

. . . . Correspondence Solicited.

Carbon Steel Company.....

PITTSBURGH, PA.

Manufacturers of

Acid Open-Hearth
STEEL

Exclusively.

EASTERN OFFICE,
Hauemeyer Building,
NEW YORK.

WESTERN OFFICE,
Fisher Building,
CHICAGO, ILL.

SOUTHWESTERN OFFICE,
Lincoln Trust Building,
ST. LOUIS, MO.

UNIVERSAL MILL PLATES, SHEARED PLATES AND SHEETS, FIRE BOX,
BOILER, SHIP AND BRIDGE PLATES, ALSO
NICKEL STEEL PLATES, PINS, PISTON RODS, AXLES, ETC.

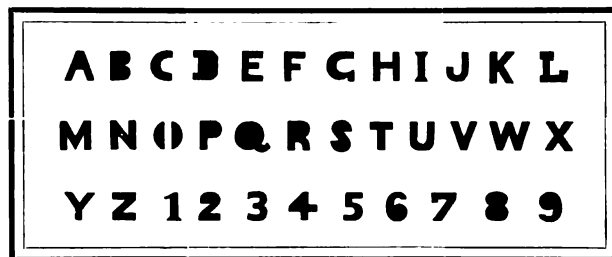
List of Sizes Sent upon Application.

ALLEN, LANE & SCOTT,

1211-1213 Clover St., PHILADELPHIA, PA.

Manufacturers of

Conductors' Punches.



The above shows the patterns of dies for letters and figures. We have, besides these, over 500 different patterns.

Descriptive circular sent upon application.

Sample Punch sent by mail upon receipt of \$2.50.

ALLEN, LANE & SCOTT,
PHILADELPHIA, PA.

Railroad
Printers!!

TICKETS,
TICKET-BOOKS,
BLANKS,
TIME-TABLES,
Etc., Etc.,

Carefully and Promptly Printed.

JAMES DALLETT.

FRANK DALLETT.

Dallett & Company,

New Rails,
Tee and Girder Rails
for Relaying.
Structural Shapes,
Plates, Spikes, Bolts,
Pig Iron.

**IRON,
STEEL,
METALS.**

Ferro-Manganese,
Merchant Bars,
Ferro-Silicon,
Blooms, Billets,
Slabs.

Old Railway Material a Specialty.
Scrap of All Kinds.

201 WALNUT PLACE,
...**PHILADELPHIA** (CENTRAL)

H. STERN, Manager.

CLEVELAND, O...
887 Woodland Ave.

The French Renovating Process Company,

MANUFACTURERS OF

THE FRENCH RENOVATING PROCESS

For **CLEANING** and **DYEING** PLUSH of CAR SEATS and **RESTORING** it to **ORIGINAL COLOR**
by hand or by our "**PATENTED CLEANING MACHINE**" at \$10.00 per car.

N. B.—To companies adopting the French Renovating Process for general use, we will furnish "**FREE**" one Revolving Brush and Complete Drawings for erecting our "**Patented Mechanical Cushion Cleaner**," enabling such companies to do the cleaning of cushions and backs by machine process instead of by hand, thereby reducing labor cost 50 per cent. on each car. (Process Pat. 1877 and 1884). (Mech. Cushion Cleaner Pat. 1898).

VERONA **TOOL** WORKS

**PITTSBURGH,
PENNSYLVANIA.**

AIR HOSE.

SIZE.	4-Ply. 3-Ply inside and 1-Ply outside Per Foot.	5-Ply. 4-Ply inside and 1-Ply outside. Per Foot.	6-Ply. 5-Ply inside and 1-Ply outside. Per Foot.
$\frac{1}{8}$ Inch.....	.51		
$\frac{3}{4}$ Inch.....	.67	.83	1.00
1 Inch.....	.83	1.08	1.24
$1\frac{1}{4}$ Inch.....	1.04	1.30	1.56
$1\frac{3}{8}$ Inch.....	1.25	1.56	1.87
2 Inch.....	1.66	2.07	2.49
3 Inch.....			4.20

SUCTION HOSE.

ON SPIRAL BRASS SPRING WIRE.

Int. Diam.	Per Ft.	Int. Diam.	Per Ft.
$\frac{3}{4}$ Inch.....	.77	$1\frac{3}{4}$ Inch.....	2.10
1 Inch.....	1.00	2 Inch.....	2.50
$1\frac{1}{4}$ Inch.....	1.25	$2\frac{1}{4}$ Inch.....	2.70
$1\frac{3}{8}$ Inch.....	1.65		

ON SPIRAL, FLAT OR ROUND STEEL WIRE.

Int. Diam.	Per Ft.	Int. Diam.	Per Ft.
$2\frac{1}{2}$ Inch.....	3.10	$6\frac{1}{2}$ Inch.....	10.50
3 Inch.....	4.00	7 Inch.....	12.00
$3\frac{1}{2}$ Inch.....	4.90	$7\frac{1}{2}$ Inch.....	13.50
4 Inch.....	5.80	8 Inch.....	15.00
$4\frac{1}{2}$ Inch.....	6.70	9 Inch.....	17.50
5 Inch.....	7.60	10 Inch.....	20.00
$5\frac{1}{2}$ Inch.....	8.50	12 Inch.....	25.00
6 Inch.....	9.50		

FILES. List Adopted November 1, 1899.

INCH.		MILL AND ROUND.		FLAT.		INCH.		SQUARE.		HAND AND PILLAR.		INCH.		HLF. RD. & THREESQ.		WARDING.	
		Bast.	2d Cut.	Smo'th	Bast.	2d Cut.	Smo'th		Bast.	2d Cut.	Smo'th	Bast.	2d Cut.	Smo'th	Bast.	2d Cut.	Smo't
4	3.00	3.50	3.90	4.30	4.70	4	3.80	4.60	4.90	3.70	4.30	4.80	4	4.80	5.60	6.10	4.00
5	3.20	3.80	4.10	4.60	4.90	5	4.10	4.80	5.30	3.90	4.70	5.30	5	5.40	6.10	6.40	4.50
6	3.50	4.00	4.50	4.80	5.30	6	4.60	5.10	5.50	4.30	5.10	5.80	6	6.10	6.70	7.10	4.90
7	3.90	4.60	4.90	5.50	6.10	7	5.10	5.80	6.30	4.90	5.80	6.30	7	7.00	7.70	8.20	5.30
8	4.30	4.90	5.40	6.00	6.60	8	5.50	6.30	7.00	5.40	6.30	6.70	8	7.50	8.30	8.90	5.90
9	4.90	5.80	6.30	7.20	7.90	9	6.60	7.70	8.30	6.70	7.80	8.30	9	8.50	9.40	9.90	6.40
10	5.60	6.40	7.00	8.10	8.70	10	7.40	8.50	9.10	7.50	8.70	9.40	10	9.10	10.10	10.70	7.00
11	6.70	7.80	8.50	9.80	10.70	11	9.10	10.40	11.30	9.40	10.90	11.80	11	10.70	11.80	12.70	7.80
12	7.50	8.60	9.40	9.70	11.00	12	10.20	11.50	12.80	10.70	12.30	13.50	12	11.80	13.00	13.90	8.70
13	9.40	10.70	11.70	11.80	13.60	13	12.50	14.30	15.40	13.80	15.20	16.20	13	14.10	15.40	16.60	10.90
14	10.70	12.00	13.10	13.30	15.30	14	13.90	16.10	17.50	15.00	17.00	18.20	14	15.50	17.00	18.30	12.80
15	13.10	15.00	16.10	16.00	18.00	15	16.90	19.20	20.90	17.90	20.60	21.70	15	18.50	20.40	21.70	14.80
16	14.70	16.80	17.90	17.80	20.10	16	18.70	21.20	23.90	20.10	22.80	24.20	16	20.60	22.50	24.20	15.40
17	18.20	20.20	21.70	21.50	24.20	17	22.50	25.40	27.50	24.20	27.10	28.60	17	24.70	27.00	28.60	17.00
18	20.20	22.70	24.30	23.90	26.80	18	25.10	28.20	30.40	26.80	29.80	31.50	18	27.50	29.90	32.00	18.70
19	24.60	27.50	29.40	28.40	31.60	19	29.70	33.20	35.70	31.90	35.40	37.60	19	32.80	35.70	38.10	19.40
20	27.40	30.70	32.90	31.50	35.30	20	32.80	36.70	39.30	35.10	38.20	41.60	20	36.20	39.40	42.90	21.00
STAVESAW.																	
8 inch..... \$9.40																	
STAVESAW—IMP.																	
6 inch..... \$ 6.40																	
7 inch..... 7.40																	
8 inch..... 8.10																	
9 inch..... 9.70																	
10 inch..... 10.70																	
12 inch..... 15.40																	
Ginsaw..... take Bastard price.																	
Crossing..... adv. 3 in.																	
Tumbler..... adv. 2 in.																	
Feather Edge (Blunt)..... adv. 3 in.																	
High Back..... adv. 3 in.																	
Half Round..... adv. 2 in.																	

FILES. List Adopted November 1, 1899.

INCH.	MILL.		MILL.		INCH.	TAPERS.		SLIM TAPERS.		BANDSAW.		INCH.	PIT SAW.	CANT SAW.	CROSS CUT.	HOOK TOOTH.	PLANER'S TOOTH.	Insert'd or Chisel Tooth.
	ONE ROUND EDGE.	TWO ROUND EDGES.	INCH.	Double Cut.		Single Cut.	Double Cut.	Single Cut.	Regu'r	Slm.								
	Bast.	2d Cut.	Smo'th	Bast.	2d Cut.	Smo'th	Single Cut.	Double Cut.	Single Cut.	Double Cut.	Regu'r	Slm.	Single Cut.	Single Cut.	Single Cut.	Single Cut.	Single Cut.	
4	3 40	3 90	4 40	3 80	4 40	4 90	2 10	2 50	2 10	2 50	2 50	2 50	4 80	4 30	4 80			
5	3 60	4 30	4 80	4 00	4 80	5 10	2 10	2 50	2 10	2 50	2 50	2 50	5 40	4 70	5 40			
6	3 90	4 50	5 10	4 40	5 00	5 60	2 20	2 60	2 20	2 60	2 60	2 60	6 10	5 40	6 10	6 70		
7	4 40	5 20	5 50	4 90	5 80	6 10	2 40	3 10	2 30	3 00	3 10	3 00	7 00	6 10	7 00	7 70		
8	4 80	5 50	6 10	5 40	6 10	6 80	2 60	3 50	2 50	3 20	3 50	3 20	7 50	6 40	7 50	8 30	6 40	8 30
9	5 50	6 50	7 10	6 10	7 30	7 90	3 00	4 00	2 90	3 50	4 00	3 50	8 50	7 80	8 50	9 40	.....	9 40
10	6 30	7 20	7 90	7 00	8 00	8 80	3 40	4 70	3 10	3 90	4 70	3 90	9 10	8 70	9 10	10 10	8 60	10 10
11	7 50	8 80	9 60	8 40	9 80	10 60	4 30	5 60	3 80	4 50	5 60	4 50	10 70	10 40	10 70	11 80		
12	8 40	9 70	10 60	9 40	10 80	11 80	5 40	6 70	4 50	5 30	6 70	5 30	11 80	11 40	11 80	13 00	12 10	
13	10 60	12 00	13 20	11 80	13 40	14 60	6 60	8 10	5 40	6 30	8 10	6 30	Climax advance 2 in. on Half Round Bastard.					
14	12 00	13 70	14 70	13 40	15 30	16 40	8 10	9 70	6 40	7 50	9 70	7 50	Round Gulletting, take Pilsaw price.					
15	14 70	16 90	18 10	16 40	18 80	20 10	10 70	12 10	8 30	9 10	12 10	9 10	DOUBLE-ENDED TAPER.					
16	16 50	18 90	20 10	18 40	21 00	22 40	12 50	14 70	9 50	11 00	14 70	11 00	6	7	8	9	10	
17	20 50	22 70	24 40	22 80	25 30	27 10	15 90	17 50	12 10	13 10	17 50	13 10						
18	22 70	25 50	27 30	25 30	28 40	30 40	18 20	20 60	13 80	15 40	20 60	15 40	3 50	3 50	3 90	4 40	4 90	

INCH.	HORSE RASPS.		FILE RASPS.		INCH.	WOOD FILES.		WOOD RASPS.		INCH.	SHOE RASPS.		INCH.	KNIFE.				
	Plain.	Bev'd and % Rasp.	Tang'd	Flat.		H.Rnd.	Flat.	H.Rnd.	Cabl'et		Flat.	H.Rnd.		Oval.	Bast.	2d Cut.	Smo'th	
6	7 40	8 10	6	4 30	6 10	8 10	7 40	8 10	10 10	6	5 40	6 10	6 40	6 40	
7	8 60	9 30	7	4 80	7 00	9 30	8 60	9 30	11 70	7	6 10	6 70	7 10	7 10	
8	9 40	10 10	8	5 30	7 50	10 10	9 40	10 10	12 80	8	6 90	7 50	7 90	7 90	
9	11 40	12 20	9	6 30	8 50	12 20	11 40	12 20	15 50	9	7 80	8 50	8 90	8 90	
10	12 80	13 70	10	7 00	9 10	13 70	12 80	13 70	17 50	10	8 50	9 10	9 50	9 50	
11	15 50	16 80	11	8 60	10 70	16 80	15 50	16 80	20 70	11	9 40	10 60	11 30	11 30	
12	17 50	18 70	12	9 70	11 80	18 70	17 50	18 70	22 80	12	10 10	11 50	12 30	12 30	
13	20 90	22 40	13	11 80	14 10	22 40	20 90	22 40	26 80	13	11 20	13 70	14 60	14 60	
14	23 20	24 80	14	13 30	15 50	24 80	23 20	24 80	29 60	14	12 20	13 70	15 20	15 20	
15	26 70	28 30	15	16 00	18 50	28 30	26 70	28 30	33 90	15	13 70	15 20	16 10	16 10	
16	30 80	32 90	16	17 80	20 80	32 90	30 80	32 90	38 90	16	16 30	17 90	19 20	19 20	
17	36 20	38 90	17	21 50	24 70	38 90	36 20	38 90	42 40	LAST MAKERS' RASPS. One inch adv. on Cabinet Rasp.	17 90	19 20	21 20	21 20	
18	40 90	43 60	18	23 90	27 50	43 60	40 90	43 60	46 90		18 20	19 90	21 20	21 20	

Sizes below 4 inches, not extended, take 4 inch price.
 Half inches not specified, take next higher full inch price.
 Dead Smooth, double the price of Bastard Cut.
 One Round Edge, advance 12% per cent.
 All lengths above those listed, advance 20 per cent. on next lower inch price.
 Cuts not specified, made upon regular blanks, advance one inch on respective kinds and nearest cut.
 Blunt Files not specified, advance one inch on respective kinds and cuts.
 Single or Flat Cut not specified, on regular shapes take Double Cut price.
 Equaling (Ballied), advance two inches on respective kinds and cuts.
 Taper Round Edges, advance 25 per cent.
 Files varying from standard sizes, subject to special prices.

A GOOD FILE,

Like a PRETTY GIRL, should
have good TEETH and a good
TEMPER.



ARCADE FILES are made with *Weed's Improved Increment Cut*. The only Files on the market tempered with the even heat of Natural Gas—thus ensuring a Superior Temper. *Arca*de Files are guaranteed to cut faster and last longer than any other Files made.

If you can save money and get better results for the same outlay, isn't it worth trying when the trial won't cost you a cent?

Send us a sample order and if the Files are not perfectly satisfactory, return them at our expense.

Write us for our prices.

THE ARCADE FILE WORKS,

Established 1842.

97 Chambers St., NEW YORK CITY.

Both these virtues and many others are
embodied in

THE ARCADE FILE.



Westinghouse Air-Brake Company,

BUILDERS OF THE



One Complete Brake in One Minute

PITTSBURG, PENNSYLVANIA.

WRENCHES.

Stillson's Patent Wrench.

Length open, in inches.....	6	8	10	14	18	24	36	48
Taken from.....	$\frac{1}{8}$ in. wire to $\frac{1}{2}$ in. pipe.	$\frac{1}{8}$ in. wire to $\frac{3}{4}$ in. pipe.	$\frac{1}{8}$ in. wire to 1 in. pipe.	$\frac{1}{4}$ in. wire to $1\frac{1}{2}$ in. pipe.	$\frac{1}{4}$ in. wire to 2 in. pipe.	$\frac{1}{4}$ in. wire to $2\frac{1}{2}$ in. pipe.	$\frac{1}{2}$ in. pipe to $3\frac{1}{2}$ in. pipe.	1 in. pipe to 5 in. pipe.
Price.....	2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00
Jaws.....	.67	.67	.75	1.00	1.33	2.00	4.00	6.00
Frames.....	.25	.25	.33	.45	.55	.65	.75	1.00
Nuts.....	.20	.20	.27	.35	.42	.50	.65	.80

Trimo Patent Wrench.

Length open, in inches.....	6	8	10	14	18	24	36	48
Take from.....	$\frac{1}{8}$ in. wire to $\frac{1}{2}$ in. pipe.	$\frac{1}{8}$ in. wire to $\frac{3}{4}$ in. pipe.	$\frac{1}{8}$ in. wire to 1 in. pipe.	$\frac{1}{4}$ in. wire to $1\frac{1}{2}$ in. pipe.	$\frac{1}{4}$ in. wire to 2 in. pipe.	$\frac{1}{4}$ in. wire to $2\frac{1}{2}$ in. pipe.	$\frac{1}{2}$ in. wire to $3\frac{1}{2}$ in. wire.	1 in. pipe to 5 in.
Price.....	2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00
Jaw.....	.67	.67	.75	1.00	1.33	2.00	4.00	6.00
Nut.....	.20	.20	.27	.35	.42	.50	.65	.80
Inserted Jaw.....	.25	.25	.33	.50	.55	.65	1.00	1.25
Saddle.....	.20	.20	.27	.35	.42	.50	.65	.80
Rocker.....	.20	.20	.27	.35	.42	.50	.65	.80

Combination Wrenches.—Bright—With Long Nut.

10 inch adjustable to pipe from $\frac{1}{8}$ inch to 1 inch in diameter, \$25.25 per dozen.

12 inch adjustable to pipe from $\frac{1}{8}$ inch to $1\frac{1}{4}$ inch in diameter, 28.50 per dozen.

15 inch adjustable to pipe from $\frac{1}{8}$ inch to 2 inch in diameter, 40.50 per dozen.

Bright—With Short Nut.

10 inch, adjustable to pipe from $\frac{1}{8}$ inch to 1 inch in diameter, \$23.00 per dozen.

12 inch, adjustable to pipe from $\frac{1}{8}$ inch to $1\frac{1}{4}$ inch in diameter, 26.00 per dozen.

15 inch, adjustable to pipe from $\frac{1}{8}$ inch to 2 inch in diameter, 37.00 per dozen.

Black, Same List.

Coe's Genuine Knife-Handle Wrench.

Length, inches.....	4	6	8	10	12	15	18	21
Price per dozen.....	9.00	9.00	10.00	12.00	14.00	24.00	30.00	36.00

Agricultural Wrenches.

Length, inches.....	4	6	8	10	12	15	18	21
Price, per dozen.....	9.00	9.00	10.00	12.00	14.00	24.00	30.00	36.00

Adjustable "S" Wrenches.

Size, inches.....	8	10	12	14
Price per dozen.....	9.00	12.00	15.00	21.00
Open, inches.....	1	$1\frac{3}{8}$	$1\frac{1}{2}$	2

Alligator Wrench.

Number.....	1	2	3	4	5
Holds pipe.....	$\frac{1}{8}$ to $\frac{3}{8}$	$\frac{3}{8}$ to $\frac{3}{4}$	$\frac{1}{2}$ to $1\frac{1}{4}$	$1\frac{1}{4}$ to 2	2 to 3
Price, each.....	.35	1.00	2.00	3.00	4.50

"Always Ready" Wrench.

Number.....	1	2	$2\frac{1}{2}$	3
Holds pipe.....	$\frac{1}{4}$ to $\frac{3}{4}$	$\frac{1}{4}$ to $1\frac{1}{4}$	$\frac{1}{4}$ to $1\frac{3}{4}$	$\frac{3}{4}$ to $1\frac{3}{4}$
Price, per dozen.....	5.00	6.75	10.50	16.00

DROP FORGED MACHINISTS' WRENCHES.

SINGLE END.

NUMBER.	Size of Nut U. S. Standard.	Size of Milled Opening.	Forged with Milled Openings. Price, Each.	Finished and Case Hardened. Price, Each.
0.....	$\frac{1}{16}$ Inch.	$\frac{1}{16}$ Inch.	.09	.18
1.....	$\frac{1}{8}$ Inch.	$\frac{1}{8}$ Inch.	.10	.20
2.....	$\frac{3}{16}$ Inch.	$\frac{1}{4}$ Inch.	.12	.24
3.....	$\frac{1}{4}$ Inch.	$\frac{1}{2}$ Inch.	.14	.28
4.....	$\frac{5}{16}$ Inch.	$\frac{3}{8}$ Inch.	.17	.34
5.....	$\frac{3}{8}$ Inch.	$\frac{1}{2}$ Inch.	.20	.40
6.....	$\frac{7}{16}$ Inch.	$\frac{5}{8}$ Inch.	.25	.50
7.....	$\frac{1}{2}$ Inch.	$1\frac{1}{8}$ Inch.	.32	.64
8.....	$\frac{5}{8}$ Inch.	$1\frac{1}{4}$ Inch.	.40	.80
9.....	$\frac{3}{4}$ Inch.	$1\frac{3}{8}$ Inch.	.50	1.00
10.....	1 Inch.	$1\frac{5}{8}$ Inch.	.65	1.30
11.....	$1\frac{1}{8}$ Inch.	$1\frac{3}{4}$ Inch.	.85	1.70
12.....	$1\frac{1}{4}$ Inch.	2 Inch.	1.10	2.20
13.....	$1\frac{3}{8}$ Inch.	$2\frac{1}{8}$ Inch.	1.40	2.80
14.....	$1\frac{1}{2}$ Inch.	$2\frac{3}{8}$ Inch.	1.75	3.50
15.....	$1\frac{3}{4}$ Inch.	$2\frac{1}{2}$ Inch.	2.10	4.20
16.....	$1\frac{7}{8}$ Inch.	$2\frac{3}{4}$ Inch.	2.50	5.00
17.....	2 Inch.	$3\frac{1}{8}$ Inch.	3.50	7.00
18.....	$2\frac{1}{4}$ Inch.	$3\frac{1}{2}$ Inch.	4.75	9.50

DOUBLE END.

NUMBER.	Size of Nut. U. S. Standard.	Size of Milled Opening.	Forged with Milled Openings. Price, Each.	Finished and Case Hardened. Price, Each.
23.....	$\frac{1}{4}$ and $\frac{1}{8}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.15	.30
24.....	$\frac{1}{4}$ and $\frac{3}{16}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.17	.34
25.....	$\frac{1}{4}$ and $\frac{1}{2}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.18	.36
26.....	$\frac{1}{4}$ and $\frac{3}{8}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.20	.40
27.....	$\frac{1}{4}$ and $\frac{1}{2}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.21	.42
28.....	$\frac{1}{4}$ and $\frac{3}{4}$ Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.23	.46
29.....	$\frac{1}{4}$ and 1 Inch.	$\frac{1}{8}$ and $\frac{1}{4}$ Inch.	.25	.50
30.....	$\frac{3}{8}$ and $\frac{1}{2}$ Inch.	$\frac{1}{4}$ and $\frac{3}{8}$ Inch.	.28	.56
31.....	$\frac{1}{2}$ and $\frac{3}{8}$ Inch.	$\frac{3}{8}$ and $\frac{1}{2}$ Inch.	.30	.60
32.....	$\frac{1}{2}$ and $\frac{1}{2}$ Inch.	$\frac{3}{8}$ and $\frac{1}{2}$ Inch.	.34	.68
33.....	$\frac{1}{2}$ and $\frac{3}{4}$ Inch.	$\frac{3}{8}$ and $\frac{1}{2}$ Inch.	.36	.72
34.....	$\frac{1}{2}$ and 1 Inch.	$\frac{3}{8}$ and $1\frac{1}{8}$ Inch.	.41	.82
35.....	$\frac{3}{4}$ and $\frac{3}{8}$ Inch.	$\frac{1}{2}$ and $1\frac{1}{8}$ Inch.	.43	.86
36.....	$\frac{3}{4}$ and $\frac{1}{2}$ Inch.	$\frac{1}{2}$ and $1\frac{1}{4}$ Inch.	.50	1.00
37.....	$\frac{3}{4}$ and $\frac{3}{4}$ Inch.	$1\frac{1}{8}$ and $1\frac{1}{4}$ Inch.	.53	1.06
38.....	$\frac{3}{4}$ and 1 Inch.	$1\frac{1}{8}$ and $1\frac{1}{2}$ Inch.	.62	1.24
39.....	$\frac{3}{4}$ and $1\frac{1}{8}$ Inch.	$1\frac{1}{4}$ and $1\frac{1}{2}$ Inch.	.65	1.30
40.....	$\frac{3}{4}$ and $1\frac{1}{4}$ Inch.	$1\frac{1}{4}$ and $1\frac{3}{8}$ Inch.	.78	1.56
41.....	$\frac{3}{4}$ and $1\frac{1}{2}$ Inch.	$1\frac{1}{2}$ and $1\frac{5}{8}$ Inch.	.82	1.64
42.....	$\frac{3}{4}$ and $1\frac{3}{8}$ Inch.	$1\frac{3}{8}$ and $1\frac{3}{4}$ Inch.	1.00	2.00
43.....	1 and $1\frac{1}{8}$ Inch.	$1\frac{3}{8}$ and $1\frac{3}{4}$ Inch.	1.08	2.16
44.....	1 and $1\frac{1}{4}$ Inch.	$1\frac{3}{8}$ and 2 Inch.	1.27	2.54
45.....	$1\frac{1}{8}$ and $1\frac{1}{4}$ Inch.	$1\frac{3}{4}$ and 2 Inch.	1.35	2.70
46.....	$1\frac{1}{8}$ and $1\frac{3}{8}$ Inch.	$1\frac{3}{4}$ and $2\frac{1}{8}$ Inch.	1.65	3.30
47.....	$1\frac{1}{4}$ and $1\frac{3}{8}$ Inch.	2 and $2\frac{1}{8}$ Inch.	1.75	3.50
48.....	$1\frac{1}{4}$ and $1\frac{1}{2}$ Inch.	2 and $2\frac{3}{8}$ Inch.	2.10	4.20
49.....	$1\frac{3}{8}$ and $1\frac{1}{2}$ Inch.	$2\frac{1}{8}$ and $2\frac{3}{8}$ Inch.	2.25	4.50
50.....	$1\frac{3}{8}$ and $1\frac{3}{4}$ Inch.	$2\frac{1}{4}$ and $2\frac{3}{4}$ Inch.	2.65	5.30

Standard Steel Wire Nails.

ADOPTED DECEMBER 1, 1896.

Steel and Iron Cut Nails.

National List of Extras for Cut Nails, Adopted at New York Dec. 1, 1896.

Common Fence, Hookhead Brads and Sheathing.		Common Barrel, Roofing, Cooper and Cement.	
20d to 60d.	EXTRA.	1 1/2 inch.	EXTRA.
10d to 16d.	Base.	1 3/8 inch.	\$ 30
8d and 9d.	\$ 05	1 1/4 inch.	40
6d and 7d.	10	1 1/2 inch.	50
4d and 5d.	20	1 inch.	60
3d.	30	7/8 inch.	70
2d.	45	3/4 inch.	85
	70		1 00
Casing, Box, Flooring and Finishing.		Slatting.	
10d and larger.	15	6d.	30
8d and 9d.	25	4d and 5d.	40
6d and 7d.	35	3d.	60
4d and 5d.	50	2d.	80
3d.	70	Clineh, Car, Boat, Chute, Clout and Hoop.	
2d.	1 00	3 inch and larger.	35
Fine Finishing.		2 1/2 and 2 3/4 inch.	45
10d and larger.	25	2 and 2 1/4 inch.	55
8d and 9d.	35	1 1/2 and 1 3/4 inch.	65
6d and 7d.	45	1 1/4 inch.	85
4d and 5d.	65	1 1/8 inch.	95
3d.	85	1 inch.	1 05
2d.	1 15	7/8 inch.	1 20
Fine Nails.		3/4 inch.	1 35
4d.	50	Tobacco Mfrs. Box Nails.	
3d.	50	6d and 7d Lining.	20
2d.	1 00	4d and 5d Lining.	30
Cut Spikes.		5d Caddy.	30
All sizes.	10	4d Caddy.	50
Light Barrel and Lining.		3d Caddy.	70
1 inch.	80	Tobacco Warehouse.	
7/8 inch.	1 00	8d.	10
3/4 inch.	1 20	6d and 7d.	20
		4d and 5d.	40

Each Half Keg, 10 cents extra.

Common, Fence, Shingle, Tobacco, Flooring and Common Brads.

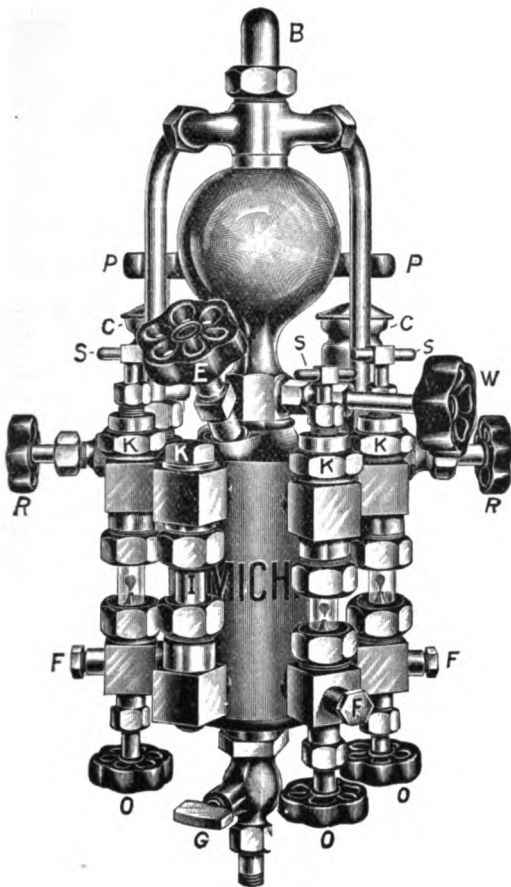
20d to 60d.	ADVANCES.	Barrel Nails.	ADVANCES.
10d to 16d.	Base.	3/4 inch.	\$1 00
8d and 9d.	\$ 05	1 inch.	85
6d and 7d.	10	1 1/8 inch.	70
4d and 5d.	20	1 1/4 inch.	60
3d.	30	1 1/2 inch.	50
2d.	45	1 3/4 inch.	40
	70	1 1/2 inch.	30
Barbed Common and Barbed Car Nails.		Barbed Roofing.	
15 cents advance over common.		3/4 inch.	75
Casing and Smooth Box.		7/8 inch.	85
10d and larger.	15	1 inch.	90
8d and 9d.	25	1 1/8 inch.	80
6d and 7d.	35	1 1/4 inch.	55
4d and 5d.	50	1 1/2 and 1 3/4 inch.	45
3d.	70	2 inch.	35
2d.	1 00	Clineh Nails.	
Barbed Box, 15 cents advance over smooth nails.		2d.	1 05
Smooth Finishing Nails.		3d.	85
10d and larger.	25	4d and 5d.	65
8d and 9d.	35	6d and 7d.	55
6d and 7d.	45	8d and 9d.	45
4d and 5d.	65	10d to 20d.	35
3d.	85	Hinge Nails.	
2d.	1 15	4d.	80
Lining Nails.		6d.	70
3/4 inch.	1 20	8d.	60
7/8 inch.	1 00	10d and larger.	50
1 inch.	80	Spikes.	
Slatting Nails.		All sizes.	10
2d.	80	Barbed Dowel Pins.	
3d.	60	5/8 inch.	2 00
4d.	40	3/4 inch.	1 75
5d.	40	1 inch.	1 50
6d.	30	1 1/8 inch.	1 25
Fine Nails.		1 1/4 inch.	1 15
2d.	1 00	1 1/2 inch.	1 00
3d.	50	1 3/4 inch.	1 00
		1 1/2 inch.	1 00

For special kinds of Nails, prices will be quoted upon application. Tinned and Galvanized Nails will be quoted upon application. Standard Nails are put up in 100 pound kegs. For special packages a reasonable charge will be made. Base Price quoted upon application.

THE MICHIGAN

Stops....

That "HOLD UP."



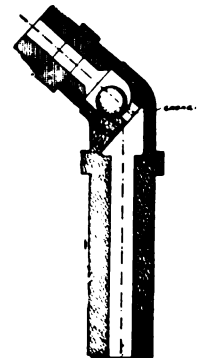
Delivers oil into ANY pressure against wide-open throttle and any position of lever.

No CHOKES in cup; open throttle gives full tallow pipe area; closing throttle automatically produces choke in steam chest PLUG.

Auxiliary slushes against wide open or closed throttle.

**MICHIGAN
LUBRICATOR
COMPANY,**

661-673 Beaubien St.,
DETROIT, MICH., U. S. A.



CHOKES



AUTOMATIC
STEAM CHEST
PLUG.

Steam-Heating Apparatus for All Classes of Railroad Cars.

McELROY COMMINGLER HOT-WATER SYSTEM.

STANDARD HOT-WATER DRUM SYSTEM.

DIRECT STEAM, with or without THERMOSTATIC TRAPS.

Sewall Couplers STANDARD in United States and Canada.

Consolidated Car-Heating Co.

ALBANY, NEW YORK.

ELECTRIC HEATERS

With Regulating Switches.
Patent Protection Guaranteed.
Patents Sweepingly Sustained
by the Courts!!



POPE SYSTEM

Compressed Oil Gas Lighting,
Interchangeable with "Pintsch
Light." Uses same gas.
Patents guaranteed.

Note—Special illustrated sheets, showing apparatus and catalog number of parts, furnished on application to purchasing agents for distribution to officials making requisitions.

SEND FOR CATALOGS.

PRICE LIST OF MISCELLANEOUS WIRE NAILS.

JULY 20, 1899.

Prices stated are per pound for 1, 5 and 10 pound packages.

GAUGE.	PER LB.	GAUGE.	PER LB.	GAUGE.	PER LB.
$\frac{1}{4}$ in. long.		1 in. long.		$2\frac{1}{4}$ in. long.	
No. 19.....	\$1.00	No. 7 to 12.....	.30	No. 3 to 10.....	\$.27
" 20.....	1.25	" 13.....	.31	" 11.....	.28
" 21.....	1.55	" 14.....	.32	" 12.....	.28
" 22.....	1.90	" 15.....	.33	" 13.....	.28
$\frac{3}{8}$ in. long.		" 16.....	.36	" 14.....	.29
No. 18.....	.80	" 17.....	.40		
" 19.....	.90	" 18.....	.43		
" 20.....	1.00	" 19.....	.53		
" 21.....	1.25	" 20.....	.64		
" 22.....	1.55				
$\frac{1}{2}$ in. long.		$1\frac{1}{8}$ in. long.		$2\frac{1}{2}$ in. long.	
No. 14 to 16.....	.55	No. 7 to 12.....	.30	No. 3 to 10.....	.26
" 17.....	.60	" 13.....	.31	" 11.....	.27
" 18.....	.65	" 14.....	.32	" 12.....	.27
" 19.....	.75	" 15.....	.32	" 13.....	.28
" 20.....	.85	" 16.....	.35		
" 21.....	1.00	" 17.....	.40		
" 22.....	1.25	" 18.....	.43		
$\frac{5}{8}$ in. long.		" 19.....	.53		
No. 12 to 14.....	.43	$1\frac{1}{4}$ and $1\frac{3}{8}$ in. long.		$2\frac{3}{4}$ in. long.	
" 15.....	.45	No. 7 to 12.....	.29	No. 3 to 10.....	.26
" 16.....	.50	" 13.....	.30	" 11.....	.27
" 17.....	.52	" 14.....	.31	" 12.....	.27
" 18.....	.58	" 15.....	.32		
" 19.....	.65	" 16.....	.34		
" 20.....	.75	" 17.....	.39		
" 21.....	.85	$1\frac{1}{2}$ and $1\frac{5}{8}$ in. long.			
" 22.....	1.10	No. 4 to 13.....	.29		
$\frac{3}{4}$ in. long.		" 14.....	.30		
No. 10.....	.36	" 15.....	.31		
" 11.....	.36	" 16.....	.33		
" 12.....	.36	" 17.....	.38		
" 13.....	.38	$1\frac{3}{4}$ in. long.			
" 14.....	.38	No. 4 to 13.....	.28		
" 15.....	.42	" 14.....	.29		
" 16.....	.43	" 15.....	.30		
" 17.....	.46	" 16.....	.32		
" 18.....	.52	" 17.....	.38		
" 19.....	.60	$3\frac{1}{4}$ in. long.			
" 20.....	.70	No. 3 to 10.....	.25		
" 21.....	.85	" 11.....	.26		
$\frac{7}{8}$ in. long.		" 12.....	.27		
No. 8.....	\$.33	$3\frac{1}{2}$ in. long.			
" 9.....	.33	No. 3 to 10.....	.25		
" 10.....	.33	" 11.....	.26		
" 11.....	.33	" 12.....	.27		
" 12.....	.33	4 in. long.			
" 13.....	.34	No. 3 to 10.....	.25		
" 14.....	.35	" 11.....	.26		
" 15.....	.36	" 12.....	.28		
" 16.....	.39	" 13.....	.28		
" 17.....	.43	" 14.....	.29		
" 18.....	.45	" 15.....	.30		
" 19.....	.56	" 16.....	.35		
" 20.....	.67				

DUSTERS.

TURKEY DUSTERS.

Split Turkey Feather.

No. 10.....	Per dozen	\$4.50
11.....	Per dozen	5.00
12.....	Per dozen	6.00
13.....	Per dozen	7.00
14.....	Per dozen	8.00
15.....	Per dozen	8.50
16.....	Per dozen	9.50
18.....	Per dozen	11.50

CAR OR CARRIAGE.

All Tail Feathers.

No. 1—12 in.....	Per dozen	8.00
2—13 in.....	Per dozen	9.00
3—14 in.....	Per dozen	10.00
4—15 in.....	Per dozen	11.00
5—16 in.....	Per dozen	13.00
6—17 in.....	Per dozen	15.00

WOOL DUSTERS.

Fancy Assorted Colors.

No. 2-0.....	Per dozen	1.20
0.....	Per dozen	3.00
2.....	Per dozen	4.80
4.....	Per dozen	6.00

OSTRICH DUSTERS.

Carriage Dusters, for Railroad Cars or Carriages, Very Heavy.

No. 1.....	Per dozen	42.00
2.....	Per dozen	54.00
3.....	Per dozen	60.00
4.....	Per dozen	66.00
5.....	Per dozen	72.00

POLISHED HANDLES.

With Screw to Fit Any Size.

3 ft.....	Per dozen	3.00
4 ft.....	Per dozen	4.00
5 ft.....	Per dozen	5.00
6 ft.....	Per dozen	6.00
8 ft.....	Per dozen	8.00

OSTRICH DUSTERS.

Bell Dusters.

No. 5.....	Per dozen	\$2.50
6.....	Per dozen	3.75
7.....	Per dozen	5.00
8.....	Per dozen	6.25
9.....	Per dozen	7.50
10.....	Per dozen	11.00
11.....	Per dozen	14.00
12.....	Per dozen	18.00
14.....	Per dozen	27.00
16.....	Per dozen	30.00
18.....	Per dozen	32.00
20.....	Per dozen	35.00
22.....	Per dozen	37.00
24.....	Per dozen	40.00

PICTURE DUSTERS.

Soft, Fine Feathers, for Planos, Paintings and Other Polished Surfaces.

No. 5.....	Per dozen	12.00
6.....	Per dozen	15.00
7.....	Per dozen	20.00
8.....	Per dozen	24.00
9.....	Per dozen	30.00
10.....	Per dozen	36.00
11.....	Per dozen	42.00
12.....	Per dozen	48.00
13.....	Per dozen	54.00
14.....	Per dozen	60.00
16.....	Per dozen	72.00

PARLOR DUSTERS.

Soft, Black Feathers, for Fine Furniture, Carriages, etc.

No. 10.....	Per dozen	32.00
12.....	Per dozen	44.00
14.....	Per dozen	56.00
16.....	Per dozen	60.00
18.....	Per dozen	64.00
20.....	Per dozen	68.00
22.....	Per dozen	72.00
24.....	Per dozen	76.00

WIDE COTTON DUCK.

Nos.	0	1	2	3	4	5	6	7	8	9	10	11	12
28 inch	.40	.38	.35	.33	.31	.29	.27	.27	.25	.23	.21	.19	.17
28 inch	.43	.40	.38	.36	.34	.31	.29	.29	.27	.25	.22	.21	.19
30 inch	.46	.43	.41	.38	.36	.34	.31	.31	.28	.27	.24	.22	.20
32 inch	.49	.46	.44	.41	.38	.36	.33	.33	.30	.28	.26	.24	.21
34 inch	.52	.49	.46	.44	.41	.38	.35	.35	.32	.30	.27	.25	.23
36 inch	.55	.52	.49	.46	.43	.40	.38	.37	.34	.32	.29	.26	.24
38 inch	.58	.55	.52	.49	.46	.43	.40	.39	.36	.34	.30	.28	.25
40 inch	.61	.58	.54	.51	.48	.45	.42	.41	.38	.35	.32	.29	.26
42 inch	.64	.60	.57	.54	.50	.47	.44	.43	.40	.37	.34	.31	.28
44 inch	.67	.63	.60	.56	.53	.49	.46	.45	.42	.39	.35	.32	.29
46 inch	.70	.66	.62	.59	.55	.51	.48	.47	.43	.41	.37	.34	.30
48 inch	.73	.69	.65	.61	.58	.54	.50	.49	.45	.43	.38	.35	.32
50 inch	.76	.72	.68	.64	.60	.56	.52	.51	.47	.44	.40	.37	.33
52 inch	.79	.75	.71	.66	.62	.58	.54	.53	.49	.46	.41	.38	.34
54 inch	.82	.78	.73	.69	.65	.60	.56	.55	.51	.48	.43	.40	.36
56 inch	.85	.80	.76	.72	.67	.63	.58	.58	.53	.50	.45	.41	.37
58 inch	.88	.83	.79	.74	.69	.65	.60	.60	.55	.51	.46	.42	.38
60 inch	.91	.86	.81	.77	.72	.67	.62	.62	.57	.53	.48	.44	.40
62 inch	.94	.89	.84	.79	.74	.69	.64	.64	.58	.55	.49	.45	.41
64 inch	.97	.92	.87	.82	.77	.72	.66	.66	.60	.57	.51	.47	.42
66 inch	1.00	.95	.90	.84	.79	.74	.69	.68	.62	.58	.53	.48	.44
72 inch	1.09	1.03	.98	.92	.86	.80	.75	.74	.68	.64	.57	.53	.47
74 inch	1.12	1.06	1.00	.94	.89	.83	.77	.76	.70	.65	.59	.54	.49
76 inch	1.15	1.09	1.03	.97	.91	.85	.79	.78	.72	.67	.61	.56	.50
80 inch	1.21	1.15	1.08	1.02	.96	.89	.83	.82	.75	.71	.64	.58	.53
84 inch	1.32	1.25	1.18	1.11	1.04	.97	.90	.89	.82	.77	.69	.63	.57
92 inch	1.54	1.46	1.38	1.30	1.22	1.14	1.06	1.04	.96	.89	.80	.74	.66
96 inch	1.71	1.62	1.53	1.44	1.35	1.26	1.17	1.15	1.06	.98	.88	.81	.73
108 inch	1.93	1.83	1.73	1.63	1.53	1.42	1.32	1.29	1.19	1.11	1.00	.92	.82
120 inch	2.14	2.03	1.92	1.80	1.69	1.58	1.47	1.44	1.32	1.23	1.11	1.05	.95

ENAMELED OIL-CLOTH.

4-4 Black Enam. Muslin, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	15½
5-4 Black Enam. Muslin, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	17
6-4 Black Enam. Muslin, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	22½
4-4 Black Enam. Drill, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	22
5-4 Black Enam. Drill, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	23
50-in. Black Enam. Drill, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	25
6-4 Black Enam. Drill, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	30
4-4 Black Enam. Duck, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	27
5-4 Black Enam. Duck, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	29
50-in. Black Enam. Duck, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	31
6-4 Black Enam. Duck, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	35
60-in. Black Enam. Duck, Glaze, Peb., Long Grain, Rubber Finish, Leather Grain	50

Mt. Vernon Woodberry Cotton Duck Company,

Largest Manufacturers of

COTTON DUCK

In the United States.

 **Make a Specialty of Supplying the Railroads.**

RICHARD CROMWELL, President.

BALTIMORE, MD.


JNO. S. HARWOOD.

WAREHOUSE AND GREASE WORKS, 9th and Arch Sts.

R. H. HARWOOD.


HARWOOD BROS.

REFINERS AND MANUFACTURERS OF ILLUMINATING


Lubricating
and Cylinder
.....OILS.
Gasolines
and Grease.



Railroad Oils
and Grease
a Specialty.


OFFICE:
1101, 1103 and 1105
E. CARY ST.
RICHMOND, VA.

C. R. BAIRD & COMPANY,
PHILADELPHIA, PA.

Merchant Bar Iron.

Pig Iron

Universal Plates . .

Foundry Coke

CIRCULAR SAWS.

SOLID TOOTH.

DIAMETER.	THICKNESS.	SIZE OF HOLE.	Price, Each.	Extra for Each Additional Gauge (Heavier).
4 inch.....	19 gauge.....	$\frac{3}{4}$ inch.....	\$ 1.00	\$.03
5 inch.....	19 gauge.....	$\frac{3}{4}$ inch.....	1.20	.04
6 inch.....	18 gauge.....	$\frac{3}{4}$ inch.....	1.40	.05
7 inch.....	18 gauge.....	$\frac{3}{4}$ inch.....	1.70	.06
8 inch.....	18 gauge.....	$\frac{3}{4}$ inch.....	2.00	.08
9 inch.....	17 gauge.....	$\frac{7}{8}$ inch.....	2.50	.10
10 inch.....	16 gauge.....	1 inch.....	3.00	.12
11 inch.....	16 gauge.....	1 inch.....	3.50	.14
12 inch.....	15 gauge.....	1 inch.....	3.75	.17
14 inch.....	15 gauge.....	$1\frac{1}{8}$ inch.....	4.50	.21
16 inch.....	14 gauge.....	$1\frac{1}{8}$ inch.....	5.50	.25
18 inch.....	13 gauge.....	$1\frac{1}{4}$ inch.....	7.00	.30
20 inch.....	13 gauge.....	$1\frac{1}{4}$ inch.....	8.50	.35
22 inch.....	12 gauge.....	$1\frac{1}{2}$ inch.....	10.00	.45
24 inch.....	11 gauge.....	$1\frac{3}{8}$ inch.....	12.00	.55
26 inch.....	11 gauge.....	$1\frac{3}{8}$ inch.....	14.00	.65
28 inch.....	10 gauge.....	$1\frac{1}{2}$ inch.....	16.00	.80
30 inch.....	10 gauge.....	$1\frac{1}{2}$ inch.....	18.00	.90
32 inch.....	10 gauge.....	$1\frac{5}{8}$ inch.....	20.00	1.00
34 inch.....	9 gauge.....	$1\frac{5}{8}$ inch.....	22.50	1.20
36 inch.....	9 gauge.....	$1\frac{5}{8}$ inch.....	25.50	1.40
38 inch.....	9 gauge.....	$1\frac{5}{8}$ inch.....	30.00	1.75
40 inch.....	9 gauge.....	2 inch.....	35.00	2.00
42 inch.....	8 gauge.....	2 inch.....	42.00	2.50
44 inch.....	8 gauge.....	2 inch.....	50.00	3.00
46 inch.....	8 gauge.....	2 inch.....	60.00	3.50
48 inch.....	8 gauge.....	2 inch.....	70.00	4.00
50 inch.....	7 gauge.....	2 inch.....	80.00	4.50
52 inch.....	7 gauge.....	2 inch.....	90.00	5.00
54 inch.....	7 gauge.....	2 inch.....	100.00	6.00
56 inch.....	7 gauge.....	2 inch.....	115.00	7.00
58 inch.....	7 gauge.....	2 inch.....	130.00	8.00
60 inch.....	6 gauge.....	2 inch.....	145.00	9.00
62 inch.....	6 gauge.....	2 inch.....	160.00	10.00
64 inch.....	6 gauge.....	2 inch.....	180.00	12.00
66 inch.....	6 gauge.....	2 inch.....	200.00	15.00
68 inch.....	5 gauge.....	2 inch.....	225.00	18.00
70 inch.....	5 gauge.....	2 inch.....	255.00	21.00
72 inch.....	5 gauge.....	2 inch.....	290.00	24.00

Circular Saws to cut metal or ivory, 50 per cent. advance. No extra charge for Saws one gauge thicker than list. Circular Saws beveled one gauge without extra charge up to 44 inches; 44 inches and larger, beveled two gauges without extra charge.

NARROW BAND SAWS.

$\frac{1}{8}$ inch, per foot.....	6 cents.	$\frac{5}{8}$ inch, per foot.....	12 cents.	$1\frac{1}{4}$ inch, per foot.....	24 cents.
$\frac{3}{8}$ inch, per foot.....	7 cents.	$\frac{3}{4}$ inch, per foot.....	14 cents.	$1\frac{3}{8}$ inch, per foot.....	27 cents.
$\frac{1}{4}$ inch, per foot.....	8 cents.	$\frac{7}{8}$ inch, per foot.....	16 cents.	$1\frac{1}{2}$ inch, per foot.....	30 cents.
$\frac{3}{8}$ inch, per foot.....	9 cents.	1 inch, per foot.....	18 cents.	$1\frac{3}{4}$ inch, per foot.....	34 cents.
$\frac{1}{2}$ inch, per foot.....	10 cents.	$1\frac{1}{8}$ inch, per foot.....	21 cents.		

STANDARD STOCKS AND DIES.

FOR PIPE.

No. 1 Stock and Solid Dies, $2\frac{1}{2}$ by $\frac{3}{4}$, cutting $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch, complete . . .	\$15.00.	Without Dies, \$5.00
No. $1\frac{1}{2}$ " " 3 by $\frac{3}{4}$, " $\frac{3}{4}$, 1, $1\frac{1}{4}$ inch, " . . .	13.00.	" 6.00
No. 2 " " 4 by $\frac{7}{8}$, " $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inch, " . . .	20.00.	" 9.50

SOLID PIPE DIES.

Dimensions.....	$\frac{1}{2}$ x 2	$\frac{3}{4}$ x $2\frac{1}{2}$	$\frac{3}{4}$ x 3	$\frac{7}{8}$ x 4
Size.....	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1	1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2	1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2
Price, each.	1.50	2.00	2.50	3.50

ARMSTRONG ADJUSTABLE STOCK AND DIES.

No. 1 Stock, 4 Pipe Dies, $\frac{1}{8}$ inch to $\frac{1}{2}$ inch	\$ 9.00
No. 2 " 5 " $\frac{1}{4}$ inch to 1 inch	12.00
No. $2\frac{1}{2}$ " 4 " $\frac{1}{2}$ inch to $1\frac{1}{4}$ inch	12.00
No. 3 " 4 " 1 inch to 2 inch	24.00
No. 4 " 3 " $1\frac{1}{4}$ inch to 2 inch	18.00
No. 6 " 2 " $2\frac{1}{2}$ inch to 3 inch	40.00

PRICE OF EXTRA DIES.

Number	1	2	$2\frac{1}{2}$	3	4	6
Price, per pair	1.25	1.50	3.25	4.00	3.00	15.00

STEEL FIGURES AND LETTERS.

SIZE.....	$\frac{1}{8}$	$\frac{1}{8}$ $\frac{3}{8}$ $\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{8}$ $\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
Figures.....	\$ 1.25	90	1.15	1.25	1.50	1.75	2.50	3.50	4.50	7.00	9.00
Letters.....	3.75	2.70	3.45	3.75	4.50	5.25	7.50	10.50	13.50	21.00	27.00

CHESTERMAN'S MEASURING TAPES.

	25 feet.	50 feet.	75 feet.	100 feet.
Steel, each.....	\$4.50	7.20	10.40	12.80
Linen, with Flexible Wires..... Also called "Metallic."	1.80	2.60	3.80	4.20

SCOTCH GAUGE GLASSES.

FOR WATER GAUGES.

LENGTH...	10	11	12	13	14	15	16	17	18	19	20	22	24
$\frac{1}{2}$ and $\frac{3}{8}$, per doz....	3.00	3.24	3.60	3.84	4.20	4.44	4.80	5.04	5.40	5.64	6.00	6.60	7.20
$\frac{3}{4}$, ".....	3.60	3.96	4.32	4.80	5.16	5.52	5.88	6.24	6.60	7.08	7.44	8.16	8.88
1 inch, ".....	6.12	6.72	7.32	7.92	8.52	9.12	9.72	10.32	10.92	11.52	12.12	13.44	14.64

POLISHED PLATE GLASS.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	6	7	8	9	10		6	7	8	9	10
6	.30					64	6.40	7.45	8.55	9.60	10.65
8	.40	.50	.55	.65		66	6.60	7.70	8.80	9.90	11.
10	.50	.60	.70	.80	.85	68	6.80	7.95	9.05	10.20	11.35
12	.60	.75	.85	.95	1.05	70	7.	8.15	9.35	10.50	11.65
14	.70	.85	1.	1.10	1.20	72	7.20	8.40	9.60	10.80	12.
16	.80	1.	1.15	1.25	1.40	74	7.40	8.65	9.85	11.10	12.70
18	.95	1.10	1.25	1.40	1.55	76	7.60	8.85	10.15	11.40	12.75
20	1.05	1.20	1.40	1.55	1.75	78	7.80	9.10	10.40	11.70	12.75
22	1.15	1.35	1.50	1.70	1.95	80	8.	9.35	10.65	12.	18.05
24	1.25	1.45	1.65	1.90	2.10	82	8.20	9.55	10.95	12.65	18.50
26	1.35	1.60	1.80	2.05	2.25	84	8.40	9.80	11.20	12.75	18.95
28	1.45	1.70	1.95	2.20	2.45	86	8.60	10.05	11.45	12.75	19.40
30	1.55	1.85	2.10	2.35	2.60	88	8.80	10.25	11.75	12.90	19.85
32	1.65	1.95	2.25	2.50	2.75	90	9.	10.50	12.	13.30	20.30
34	1.80	2.10	2.40	2.65	2.95	92	9.20	10.75	12.60	13.70	20.75
36	1.90	2.20	2.50	2.80	3.15	94	9.40	10.95	12.95	14.10	21.20
38	2.	2.30	2.60	3.	3.30	96	9.60	11.20	13.35	14.50	21.70
40	2.10	2.45	2.75	3.15	4.15	98	9.80	11.45	13.70	14.90	22.15
42	2.20	2.55	2.90	3.30	4.35	100	10.	11.65	14.05	15.30	22.60
44	2.30	2.65	3.05	4.15	4.60	102	10.20	11.90	14.45	15.70	23.05
46	2.40	2.80	3.20	4.30	4.80	104	10.40	12.15	14.85	16.10	23.50
48	2.50	2.90	3.35	4.50	5.	106	10.60	12.40	15.25	16.55	23.95
50	2.60	3.05	4.20	4.70	5.20	108	10.80	12.65	15.65	16.95	24.40
52	2.70	3.20	4.35	4.90	5.40	110	11.	12.90	16.05	17.35	24.85
54	2.80	3.30	4.50	5.10	5.60	112	11.20	13.15	16.45	17.75	25.30
56	2.90	4.10	4.65	5.25	5.85	114	11.40	13.40	16.85	18.15	25.75
58	3.	4.25	4.80	5.45	6.05	116	11.60	13.65	17.25	18.55	26.20
60	3.15	4.40	5.	5.65	6.25	118	11.80	13.90	17.65	18.95	26.65
62	3.20	4.45	5.25	5.90	6.35	120	12.	14.15	18.05	19.35	27.10

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	12	14	16	18		12	14	16	18
12	1.25				70	14.	16.30	18.70	21.
14	1.45	1.70			72	14.40	16.80	19.20	21.60
16	1.65	1.95	2.20		74	14.80	17.30	19.70	22.20
18	1.90	2.20	2.50	2.80	76	15.20	17.70	20.30	22.80
20	2.10	2.45	2.75	3.15	78	15.60	18.20	20.80	23.40
22	2.30	2.65	3.05	4.15	80	16.	18.70	21.30	24.
24	2.50	2.90	3.35	4.50	82	16.40	19.10	21.90	24.60
26	2.70	3.15	4.35	4.90	84	16.80	19.60	22.40	25.20
28	2.90	4.10	4.65	5.25	86	17.20	20.10	22.90	25.80
30	3.15	4.40	5.	5.65	88	17.60	20.50	23.50	26.40
32	3.35	4.65	5.35	6.	90	18.	21.	24.	27.00
34	4.25	4.95	5.65	6.40	92	18.40	21.50	25.00	27.60
36	4.50	5.25	6.	6.75	94	18.80	21.90	25.60	28.20
38	4.75	5.55	6.35	7.15	96	19.20	22.40	26.20	28.80
40	5.	5.85	6.65	7.50	98	19.60	22.90	26.80	29.40
42	5.25	6.15	7.	12.60	100	20.	23.30	27.40	30.00
44	5.50	6.40	7.35	13.20	102	20.40	23.80	28.00	30.60
46	5.75	6.70	12.80	13.80	104	20.80	24.30	28.60	31.20
48	6.	7.	12.80	14.40	106	21.20	24.80	29.20	31.80
50	6.25	7.30	13.30	15.	108	21.60	25.30	29.80	32.40
52	6.50	12.10	13.90	15.60	110	22.	25.80	30.40	33.00
54	6.75	12.60	14.40	16.20	112	22.40	26.30	31.00	33.60
56	7.	13.10	14.90	16.80	114	22.80	26.80	31.60	34.20
58	7.25	13.50	15.50	17.40	116	23.20	27.30	32.20	34.80
60	7.50	14.	16.	18.	118	23.60	27.80	32.80	35.40
62	12.40	14.50	16.50	18.60	120	24.	28.30	33.40	36.00
64	12.80	14.90	17.10	19.20	122	24.40	28.80	34.00	36.60
66	13.20	15.40	17.60	19.80	124	24.80	29.30	34.60	37.20
68	13.60	15.90	18.10	20.40	126	25.20	29.80	35.20	37.80

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	12	14	16	18		12	14	16	18
128.....	34.70	40.50	46.20	52.	150.....	40.60	47.40	54.20	60.90
130.....	35.20	41.10	47.	52.80	152.....	41.20	48.	54.90	61.80
132.....	35.80	41.70	47.70	53.60	154.....	41.70	48.70	55.60	62.60
134.....	36.30	42.30	48.50	54.40	156.....	42.20	49.30	56.40	63.40
136.....	36.90	43.	49.20	55.30	158.....	42.80	50.	57.10	64.20
138.....	37.40	43.70	49.90	56.10	160.....	43.40	50.60	57.80	65.
140.....	38.	44.30	50.60	56.90	162.....	43.90	51.20	58.50	68.80
142.....	38.50	44.90	51.30	57.70	164.....	44.50	51.80	59.20	69.70
144.....	39.	45.50	52.	58.50	166.....	45.	52.50	60.	70.60
146.....	39.60	46.10	52.70	59.30	168.....	45.50	53.10	60.70	71.40
148.....	40.10	46.80	53.40	60.10	170.....	46.	53.70	61.40	72.30

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	20	22	24	26	28		20	22	24	26	28
20.....	4.15					96.....	43.40	47.70	52.	56.40	60.70
22.....	4.60	5.05				98.....	44.30	48.70	53.10	57.60	62.
24.....	5.	5.50	6.00			100.....	45.20	49.70	54.20	58.70	63.30
26.....	5.40	5.95	6.50	7.05		102.....	46.10	50.70	55.30	59.90	64.50
28.....	5.85	6.40	7.10	12.10	13.10	104.....	47.	51.70	56.40	61.	68.70
30.....	6.25	6.90	7.50	13.	14.	106.....	47.90	52.60	57.50	62.20	70.10
32.....	6.65	7.35	12.80	13.90	14.90	108.....	48.80	53.60	58.50	63.40	71.40
34.....	7.10	12.50	13.60	14.70	15.90	110.....	49.70	54.60	59.60	64.60	72.70
36.....	7.50	13.20	14.40	15.60	16.80	112.....	50.60	55.60	60.70	68.70	74.10
38.....	12.70	13.90	15.20	16.50	17.70	114.....	51.50	56.60	61.80	70.	75.40
40.....	13.30	14.70	16.	17.30	18.70	116.....	52.40	57.60	62.90	71.20	76.70
42.....	14.	15.40	16.80	18.20	19.60	118.....	53.30	58.60	64.	72.40	78.
44.....	14.70	16.10	17.60	19.10	20.50	120.....	54.20	59.60	65.	73.70	79.30
46.....	15.30	16.90	18.40	19.90	21.50	122.....	55.10	60.60	69.10	74.90	80.70
48.....	16.	17.60	19.20	20.80	22.40	124.....	56.	61.60	70.30	76.10	82.
50.....	16.70	18.30	20.	21.70	23.30	126.....	56.90	62.60	71.40	77.40	83.30
52.....	17.30	19.10	20.80	22.50	32.90	128.....	57.80	63.60	72.50	78.60	84.70
54.....	18.	19.80	21.60	23.40	34.10	130.....	58.70	64.60	73.70	79.80	86.
56.....	18.70	20.50	22.40	32.90	35.40	132.....	59.60	65.60	74.80	81.10	87.30
58.....	19.30	21.30	23.20	34.	36.70	134.....	60.50	66.60	76.	82.30	88.60
60.....	20.	22.	24.	35.20	37.90	136.....	61.40	70.70	77.10	83.50	89.90
62.....	20.70	22.70	33.60	36.40	39.20	138.....	62.30	71.70	78.20	84.80	91.30
64.....	21.30	23.50	34.70	37.60	40.50	140.....	63.20	72.70	79.30	86.	92.60
66.....	22.	32.80	35.80	38.70	41.70	142.....	64.10	73.80	80.50	87.20	93.90
68.....	22.70	33.70	36.90	39.90	43.	144.....	65.	74.80	81.60	88.40	95.20
70.....	23.30	34.70	38.	41.	44.30	146.....	66.90	75.90	82.70	89.60	96.50
72.....	24.	35.70	39.	42.20	45.50	148.....	69.90	76.90	83.90	90.90	97.80
74.....	33.40	36.70	40.10	43.40	46.80	150.....	70.90	77.90	85.	92.10	99.20
76.....	34.30	37.70	41.20	44.60	48.10	152.....	71.80	79.	86.10	93.30	101.
78.....	35.20	38.70	42.30	45.80	49.30	154.....	72.70	80.	87.30	94.60	102.
80.....	36.10	39.70	43.40	47.	50.60	156.....	73.70	81.10	88.40	95.80	103.
82.....	37.	40.70	44.50	48.20	51.90	158.....	74.60	82.10	89.50	97.00	104.
84.....	37.90	41.70	45.50	49.30	53.10	160.....	75.60	83.10	90.70	98.30	106.
86.....	38.80	42.70	46.60	50.50	54.40	162.....	76.50	84.20	91.80	99.50	107.
88.....	39.70	43.70	47.70	51.70	55.70	164.....	77.50	85.20	92.90	101.	108.
90.....	40.60	44.70	48.80	52.80	56.90	166.....	78.40	86.20	94.10	102.	110.
92.....	41.50	45.70	49.90	54.	58.20	168.....	79.30	87.30	95.20	103.	111.
94.....	42.40	46.70	51.	55.20	59.50	170.....	80.30	88.30	96.30	104.	112.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	30	32	34	36	38		30	32	34	36	38
30.....	15.					40.....	20.	21.30	22.70	24.	34.80
32.....	16.	17.10				42.....	21.	22.40	23.80	34.10	36.
34.....	17.	18.10	19.30			44.....	22.	23.50	33.70	35.80	37.80
36.....	18.	19.20	20.40	21.60		46.....	23.	33.20	35.30	37.40	39.50
38.....	19.	20.30	21.50	22.80	32.60	48.....	24.	34.70	36.90	39.	41.20

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	30	32	34	36	38		30	32	34	36	38
50	33.80	36.10	38.40	40.60	42.90	112	79.30	84.60	89.90	95.20	101.
52	35.20	37.60	39.90	42.20	44.60	114	80.80	86.10	91.50	96.90	102.
54	36.60	39.	41.40	43.90	46.30	116	82.20	87.60	93.10	98.60	104.
56	38.	40.50	43.	45.50	48.	118	83.60	89.10	94.70	100.	106.
58	39.30	41.90	44.50	47.10	49.80	120	85.	90.70	96.30	102.	108.
60	40.60	43.40	46.	48.80	51.50	122	86.40	92.20	98.	104.	109.
62	42.	44.80	47.60	50.40	53.20	124	87.90	93.70	99.50	105.	111.
64	43.40	46.20	49.20	52.	54.90	126	89.30	95.20	101.	107.	113.
66	44.70	47.70	50.70	53.60	56.60	128	90.70	96.70	103.	109.	115.
68	46.	49.20	52.20	55.30	58.30	130	92.10	98.20	104.	110.	117.
70	47.40	50.60	53.70	56.90	60.	132	93.50	99.70	106.	112.	118.
72	48.80	52.	55.30	58.50	61.80	134	95.	101.	108.	114.	120.
74	50.10	53.40	56.80	60.10	63.50	136	96.40	103.	109.	116.	122.
76	51.50	54.90	58.30	61.80	68.20	138	97.80	104.	111.	118.	124.
78	52.80	56.40	59.90	63.40	70.	140	99.20	106.	112.	119.	126.
80	54.20	57.80	61.40	65.	71.80	142	101.	107.	114.	120.	127.
82	55.50	59.20	63.	69.70	73.60	144	102.	109.	116.	122.	129.
84	56.90	60.70	64.50	71.40	75.40	146	103.	110.	117.	124.	131.
86	58.20	62.10	69.	73.10	77.20	148	105.	112.	119.	126.	133.
88	59.60	63.60	70.70	74.80	79.	150	106.	113.	120.	127.	135.
90	60.90	65.	72.30	76.50	80.80	152	108.	115.	122.	129.	136.
92	62.30	69.50	73.90	78.20	82.60	154	109.	116.	124.	131.	138.
94	63.70	71.	75.50	79.90	84.40	156	110.	118.	125.	133.	140.
96	65.	72.50	77.10	81.60	86.20	158	111.	119.	127.	135.	142.
98	69.40	74.10	78.70	83.30	88.	160	113.	121.	128.	136.	144.
100	70.90	75.60	80.30	85.	89.80	162	115.	122.	130.	137.	145.
102	72.30	77.10	81.90	86.70	91.60	164	116.	124.	132.	139.	147.
104	73.70	78.60	83.50	88.40	93.40	166	118.	126.	133.	141.	149.
106	75.10	80.10	85.10	90.10	95.20	168	119.	127.	135.	143.	151.
108	76.50	81.60	86.70	91.80	97.	170	120.	128.	136.	144.	152.
110	77.90	83.10	88.30	93.50	98.70						
	40	42	44	46	48		40	42	44	46	48
40	26.10					100	91.50	99.20	104.	109.	113.
42	37.90	39.80				102	96.40	101.	106.	111.	116.
44	39.70	41.70	43.80			104	98.30	103.	108.	113.	118.
46	41.50	43.60	45.70	47.80		106	100.	105.	110.	115.	120.
48	43.40	45.50	47.70	49.90	52.	108	102.	107.	112.	117.	

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	40	42	44	46	48		40	42	44	46	48
160.....	151.	168.	176.	184.	192.	190.....	211.	222.	232.	243.	253.
162.....	153.	170.	178.	186.	194.	192.....	293.	308.	323.	337.	352.
164.....	164.	172.	180.	189.	197.	194.....	297.	311.	326.	340.	356.
166.....	166.	174.	183.	191.	199.	196.....	300.	315.	330.	344.	360.
168.....	168.	177.	185.	193.	202.	198.....	303.	318.	333.	348.	363.
170.....	170.	179.	187.	195.	204.	200.....	306.	321.	336.	352.	367.
172.....	172.	181.	189.	198.	206.	202.....	309.	325.	340.	355.	370.
174.....	174.	183.	191.	200.	209.	204.....	312.	328.	343.	359.	374.
176.....	176.	185.	194.	202.	211.	206.....	315.	331.	346.	362.	378.
178.....	178.	187.	196.	205.	214.	208.....	318.	334.	350.	366.	381.
180.....	180.	189.	198.	207.	216.	210.....	321.	337.	353.	369.	385.
182.....	202.	212.	222.	232.	243.	212.....	324.	340.	356.	373.	389.
184.....	204.	215.	225.	235.	246.	214.....	327.	343.	360.	376.	393.
186.....	207.	217.	227.	237.	248.	216.....	330.	346.	363.	379.	396.
188.....	209.	220.	230.	240.	251.	218.....	333.	350.	366.	383.	400.
	50	52	54	56	58		50	52	54	56	58
50.....	56.50					136.....	170.	177.	184.	190.	197.
52.....	58.70	61.				138.....	172.	179.	186.	193.	200.
54.....	60.90	63.40	68.80			140.....	175.	182.	189.	196.	203.
56.....	63.20	68.70	71.40	74.10		142.....	177.	185.	192.	199.	206.
58.....	68.50	71.20	74.	76.70	79.40	144.....	180.	187.	194.	202.	209.
60.....	70.90	73.70	76.50	79.30	82.20	146.....	182.	190.	197.	204.	212.
62.....	73.20	76.10	79.	82.	84.90	148.....	185.	192.	200.	207.	215.
64.....	75.60	78.60	81.60	84.70	87.70	150.....	187.	195.	202.	210.	218.
66.....	77.90	81.10	84.20	87.30	90.40	152.....	190.	198.	205.	213.	220.
68.....	80.30	83.50	86.70	89.90	93.10	154.....	192.	200.	208.	216.	223.
70.....	82.60	85.90	89.30	92.50	95.80	156.....	195.	203.	210.	218.	226.
72.....	85.	88.40	91.80	95.20	98.60	158.....	197.	205.	213.	221.	229.
74.....	87.40	90.90	94.40	97.90	101.	160.....	200.	208.	216.	224.	232.
76.....	89.70	93.30	96.90	101.	104.	162.....	202.	210.	219.	227.	235.
78.....	92.10	95.70	99.40	103.	107.	164.....	205.	213.	221.	230.	238.
80.....	94.50	98.30	102.	106.	110.	166.....	207.	216.	224.	232.	241.
82.....	96.80	101.	105.	108.	112.	168.....	210.	218.	227.	235.	244.
84.....	99.20	103.	107.	111.	115.	170.....	212.	221.	229.	238.	246.
86.....	102.	106.	110.	113.	118.	172.....	215.	224.	232.	241.	249.
88.....	104.	108.	112.	116.	121.	174.....	217.	226.	235.	244.	252.
90.....	106.	110.	115.	119.	123.	176.....	220.	229.	238.	246.	255.
92.....	109.	113.	117.	122.	126.	178.....	222.	231.	240.	249.	258.
94.....	111.	115.	120.	124.	129.	180.....	225.	234.	243.	252.	261.
96.....	113.	118.	123.	127.	131.	182.....	253.	263.	273.	283.	293.
98.....	116.	120.	125.	130.	134.	184.....	256.	266.	276.	286.	297.
100.....	118.	123.	127.	132.	137.	186.....	258.	269.	279.	290.	300.
102.....	120.	125.	130.	135.	140.	188.....	261.	271.	282.	293.	303.
104.....	123.	128.	133.	138.	142.	190.....	264.	274.	285.	296.	306.
106.....	125.	130.	135.	140.	145.	192.....	367.	381.	396.	411.	425.
108.....	127.	133.	138.	143.	148.	194.....	370.	385.	400.	415.	430.
110.....	130.	135.	140.	145.	151.	196.....	374.	389.	404.	419.	434.
112.....	132.	137.	143.	148.	162.	198.....	378.	393.	408.	424.	439.
114.....	135.	140.	145.	151.	165.	200.....	382.	397.	412.	428.	443.
116.....	137.	142.	148.	162.	168.	202.....	386.	401.	417.	432.	447.
118.....	139.	145.	150.	165.	171.	204.....	389.	405.	421.	437.	452.
120.....	142.	147.	153.	168.	174.	206.....	393.	409.	425.	441.	456.
122.....	144.	150.	165.	171.	177.	208.....	397.	413.	429.	445.	460.
124.....	146.	152.	167.	174.	180.	210.....	400.	417.	433.	449.	465.
126.....	149.	164.	170.	176.	183.	212.....	404.	421.	437.	454.	470.
128.....	151.	166.	173.	179.	186.	214.....	408.	425.	441.	458.	474.
130.....	162.	169.	175.	182.	188.	216.....	413.	429.	445.	462.	478.
132.....	165.	172.	178.	185.	191.	218.....	417.	434.	450.	467.	483.
134.....	167.	174.	181.	188.	194.						

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	60	62	64	66	68		60	62	64	66	68
60.....	85.					140.....	210.	217.	224.	231.	238.
62.....	88.	91.				142.....	213.	220.	227.	234.	241.
64.....	91.	94.	97.			144.....	216.	223.	230.	238.	245.
66.....	94.	97.	100.	103.		146.....	219.	226.	234.	241.	248.
68.....	96.	100.	103.	106.	109.	148.....	222.	229.	237.	244.	252.
70.....	99.	102.	106.	109.	112.	150.....	225.	232.	240.	247.	255.
72.....	102.	105.	109.	112.	116.	152.....	228.	236.	243.	251.	258.
74.....	105.	108.	112.	115.	119.	154.....	231.	239.	246.	254.	262.
76.....	108.	111.	115.	118.	122.	156.....	234.	242.	250.	257.	265.
78.....	110.	114.	118.	121.	125.	158.....	237.	245.	253.	261.	269.
80.....	113.	117.	121.	125.	128.	160.....	240.	248.	256.	264.	272.
82.....	116.	120.	124.	128.	132.	162.....	243.	251.	259.	267.	275.
84.....	119.	123.	127.	131.	135.	164.....	246.	254.	262.	271.	279.
86.....	122.	126.	130.	134.	138.	166.....	249.	257.	266.	274.	282.
88.....	125.	129.	133.	137.	141.	168.....	252.	260.	269.	277.	286.
90.....	127.	132.	136.	140.	144.	170.....	255.	263.	272.	280.	289.
92.....	130.	135.	139.	143.	148.	172.....	258.	267.	275.	284.	292.
94.....	133.	138.	142.	146.	151.	174.....	261.	270.	278.	287.	296.
96.....	136.	141.	145.	150.	153.	176.....	264.	273.	282.	290.	299.
98.....	139.	143.	148.	153.	157.	178.....	267.	276.	285.	294.	303.
100.....	142.	146.	151.	155.	160.	180.....	270.	279.	288.	297.	306.
102.....	144.	149.	153.	158.	163.	182.....	303.	314.	324.	334.	344.
104.....	147.	152.	156.	161.	166.	184.....	307.	317.	327.	337.	347.
106.....	150.	154.	158.	163.	168.	186.....	310.	320.	331.	341.	351.
108.....	153.	157.	161.	166.	171.	188.....	314.	324.	334.	345.	355.
110.....	155.	160.	164.	169.	174.	190.....	317.	327.	338.	348.	359.
112.....	158.	163.	167.	172.	177.	192.....	440.	455.	469.	484.	499.
114.....	161.	166.	170.	175.	180.	194.....	445.	459.	474.	489.	504.
116.....	164.	169.	173.	178.	183.	196.....	449.	464.	479.	494.	509.
118.....	167.	172.	176.	181.	186.	198.....	454.	469.	484.	499.	514.
120.....	170.	175.	179.	184.	189.	200.....	458.	473.	489.	504.	520.
122.....	173.	178.	182.	187.	192.	202.....	463.	478.	494.	509.	525.
124.....	176.	181.	185.	190.	195.	204.....	468.	483.	499.	514.	530.
126.....	179.	184.	188.	193.	198.	206.....	472.	488.	504.	519.	535.
128.....	182.	187.	191.	196.	201.	208.....	477.	492.	508.	524.	540.
130.....	185.	190.	194.	199.	204.	210.....	481.	497.	513.	529.	545.
132.....	188.	193.	197.	202.	207.	212.....	486.	501.	518.	534.	550.
134.....	191.	196.	200.	205.	210.	214.....	490.	506.	523.	539.	555.
136.....	194.	199.	203.	208.	213.	216.....	495.	512.	528.	545.	561.
138.....	197.	202.	206.	211.	216.	218.....	500.	517.	533.	550.	566.
	70	72	74	76	78		70	72	74	76	78
70.....	116.					112.....	196.	202.	207.	213.	218.
72.....	119.	122.				114.....	199.	206.	211.	217.	222.
74.....	122.	126.	129.			116.....	203.	209.	215.	220.	226.
76.....	126.	129.	133.	136.		118.....	206.	212.	218.	224.	230.
78.....	129.	133.	136.	140.	144.	120.....	210.	216.	222.	228.	234.
80.....	132.	136.	139.	144.	147.	122.....	213.	220.	226.	232.	238.
82.....	136.	139.	143.	147.	151.	124.....	217.	223.	230.	236.	242.
84.....	139.	143.	147.	151.	154.	126.....	220.	227.	233.	239.	246.
86.....	142.	146.	150.	153.	157.	128.....	224.	230.	237.	243.	250.
88.....	145.	150.	153.	157.	161.	130.....	227.	234.	240.	247.	253.
90.....	149.	153.	156.	160.	164.	132.....	231.	238.	244.	251.	257.
92.....	152.	156.	160.	164.	168.	134.....	234.	241.	248.	255.	261.
94.....	155.	159.	163.	167.	171.	136.....	238.	245.	251.	258.	265.
96.....	158.	162.	166.	170.	174.	138.....	241.	248.	255.	262.	269.
98.....	161.	165.	169.	173.	177.	140.....	245.	252.	259.	266.	273.
100.....	164.	168.	172.	176.	180.	142.....	248.	256.	263.	270.	277.
102.....	167.	171.	175.	179.	183.	144.....	252.	259.	266.	274.	281.
104.....	170.	174.	178.	182.	186.	146.....	255.	263.	270.	277.	285.
106.....	173.	177.	181.	185.	189.	148.....	259.	266.	274.	281.	289.
108.....	176.	180.	184.	188.	192.	150.....	262.	270.	277.	285.	292.
110.....	179.	183.	187.	191.	195.	152.....	266.	274.	281.	289.	296.

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.					LENGTH.	WIDTH.				
	70	72	74	76	78		70	72	74	76	78
154.....	289.	277.	285.	293.	300.	188.....	368.	376.	388.	397.	448.
156.....	273.	281.	288.	296.	304.	190.....	370.	380.	391.	441.	453.
158.....	276.	284.	292.	300.	308.	192.....	513.	528.	543.	608.	624.
160.....	280.	288.	296.	304.	312.	194.....	518.	534.	548.	615.	631.
162.....	283.	292.	300.	308.	316.	196.....	524.	539.	604.	621.	637.
164.....	287.	295.	303.	312.	320.	198.....	529.	545.	610.	627.	643.
166.....	290.	299.	307.	315.	324.	200.....	534.	550.	617.	633.	650.
168.....	294.	302.	311.	319.	328.	202.....	540.	606.	623.	640.	656.
170.....	297.	306.	314.	323.	331.	204.....	545.	612.	630.	646.	663.
172.....	301.	310.	318.	327.	335.	206.....	601.	618.	636.	652.	669.
174.....	304.	313.	322.	331.	339.	208.....	607.	624.	642.	659.	676.
176.....	308.	317.	325.	334.	343.	210.....	612.	630.	648.	665.	682.
178.....	311.	320.	329.	338.	347.	212.....	618.	636.	654.	672.	689.
180.....	315.	324.	333.	342.	351.	214.....	624.	642.	660.	678.	696.
182.....	354.	364.	374.	384.	394.	216.....	630.	648.	666.	684.	702.
184.....	358.	368.	378.	388.	399.	218.....	636.	654.	672.	690.	708.
186.....	362.	372.	382.	393.	443.						
	80	82	84	86	88		80	82	84	86	88
80.....	151.					150.....	300.	307.	315.	322.	330.
82.....	164.	168.				152.....	304.	312.	319.	327.	334.
84.....	168.	172.	176.			154.....	308.	316.	323.	331.	339.
86.....	172.	176.	181.	185.		156.....	312.	320.	328.	335.	343.
88.....	176.	180.	185.	189.	194.	158.....	316.	324.	332.	340.	348.
90.....	180.	184.	189.	193.	198.	160.....	320.	328.	336.	344.	352.
92.....	184.	189.	193.	198.	202.	162.....	324.	332.	340.	348.	356.
94.....	188.	193.	197.	202.	207.	164.....	328.	336.	344.	353.	401.
96.....	192.	197.	202.	206.	211.	166.....	332.	340.	349.	357.	406.
98.....	196.	201.	206.	211.	216.	168.....	336.	344.	353.	401.	411.
100.....	200.	205.	210.	215.	220.	170.....	340.	348.	357.	406.	416.
102.....	204.	209.	214.	219.	224.	172.....	344.	353.	401.	411.	420.
104.....	208.	213.	218.	224.	229.	174.....	348.	357.	406.	416.	425.
106.....	212.	217.	223.	228.	233.	176.....	352.	401.	411.	420.	430.
108.....	216.	221.	227.	232.	237.	178.....	356.	405.	415.	425.	435.
110.....	220.	225.	231.	237.	242.	180.....	360.	410.	420.	430.	440.
112.....	224.	230.	235.	241.	246.	182.....	445.	456.	467.	478.	489.
114.....	228.	234.	239.	245.	251.	184.....	450.	461.	472.	483.	495.
116.....	232.	238.	244.	250.	255.	186.....	455.	466.	477.	489.	500.
118.....	236.	242.	248.	254.	260.	188.....	460.	471.	482.	494.	506.
120.....	240.	246.	252.	258.	264.	190.....	464.	476.	488.	500.	511.
122.....	244.	250.	256.	262.	268.	192.....	640.	656.	672.	688.	704.
124.....	248.	254.	260.	267.	273.	194.....	647.	663.	679.	695.	711.
126.....	252.	258.	265.	271.	277.	196.....	653.	670.	686.	703.	719.
128.....	256.	262.	269.	275.	282.	198.....	660.	676.	693.	710.	907.
130.....	260.	266.	273.	279.	286.	200.....	666.	683.	700.	717.	917.
132.....	264.	271.	277.	284.	290.	202.....	673.	690.	707.	905.	926.
134.....	268.	275.	281.	288.	295.	204.....	679.	697.	714.	914.	935.
136.....	272.	279.	286.	292.	299.	206.....	686.	704.	901.	923.	944.
138.....	276.	283.	290.	297.	304.	208.....	693.	711.	910.	932.	953.
140.....	280.	287.	294.	301.	308.	210.....	700.	718.	918.	941.	962.
142.....	284.	291.	298.	305.	312.	212.....	706.	905.	927.	950.	972.
144.....	288.	295.	302.	310.	317.	214.....	713.	914.	936.	959.	981.
146.....	292.	299.	307.	314.	321.	216.....	720.	923.	944.	967.	990.
148.....	296.	303.	311.	318.	326.	218.....	908.	931.	953.	976.	999.

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	90	92	94	96		90	92	94	96
90.	202.				156.	351.	359.	407.	416.
92.	207.	212.			158.	355.	404.	413.	421.
94.	211.	216.	221.		160.	360.	409.	418.	427.
96.	216.	221.	226.	230.	162.	405.	414.	423.	432.
98.	220.	225.	230.	235.	164.	410.	419.	428.	437.
100.	225.	230.	235.	240.	166.	415.	424.	433.	443.
102.	229.	235.	240.	245.	168.	420.	429.	439.	448.
104.	234.	239.	244.	250.	170.	425.	434.	444.	453.
106.	238.	244.	249.	254.	172.	430.	440.	449.	459.
108.	243.	248.	254.	259.	174.	435.	445.	454.	464.
110.	247.	253.	258.	264.	176.	440.	450.	460.	469.
112.	252.	258.	263.	269.	178.	445.	455.	465.	475.
114.	256.	262.	268.	274.	180.	450.	460.	470.	480.
116.	261.	267.	273.	278.	182.	500.	511.	523.	758.
118.	265.	272.	277.	283.	184.	506.	517.	751.	767.
120.	270.	276.	282.	288.	186.	511.	523.	759.	775.
122.	274.	281.	287.	293.	188.	517.	751.	767.	783.
124.	279.	285.	291.	298.	190.	522.	759.	775.	792.
126.	283.	290.	296.	302.	192.	720.	920.	940.	960.
128.	288.	294.	301.	307.	194.	909.	930.	950.	970.
130.	292.	299.	305.	312.	196.	919.	939.	960.	980.
132.	297.	304.	310.	317.	198.	928.	949.	970.	990.
134.	301.	308.	315.	322.	200.	937.	958.	979.	1000.
136.	306.	313.	320.	326.	202.	947.	968.	989.	1010.
138.	310.	317.	324.	331.	204.	956.	977.	999.	1020.
140.	315.	322.	329.	336.	206.	965.	987.	1009.	1030.
142.	319.	327.	334.	341.	208.	975.	997.	1018.	1040.
144.	324.	331.	339.	346.	210.	984.	1006.	1028.	1050.
146.	328.	336.	343.	350.	212.	994.	1016.	1038.	1060.
148.	333.	340.	348.	355.	214.	1003.	1025.	1048.	1070.
150.	337.	345.	352.	360.	216.	1012.	1035.	1057.	1080.
152.	342.	350.	357.	405.	218.	1022.	1045.	1067.	1090.
154.	346.	354.	402.	411.					
	98	100	102	104		98	100	102	104
98.	240.				154.	419.	428.	436.	445.
100.	245.	250.			156.	425.	433.	442.	451.
102.	250.	255.	260.		158.	430.	439.	448.	456.
104.	255.	260.	265.	270.	160.	436.	444.	453.	462.
106.	260.	265.	270.	276.	162.	441.	450.	459.	468.
108.	265.	270.	275.	281.	164.	446.	456.	465.	474.
110.	269.	275.	280.	286.	166.	452.	461.	470.	480.
112.	274.	280.	285.	291.	168.	457.	467.	476.	485.
114.	279.	285.	290.	296.	170.	463.	472.	481.	490.
116.	284.	290.	296.	302.	172.	468.	478.	487.	496.
118.	289.	295.	301.	307.	174.	474.	484.	493.	502.
120.	294.	300.	306.	312.	176.	479.	489.	498.	507.
122.	299.	305.	311.	317.	178.	485.	495.	504.	513.
124.	304.	310.	316.	322.	180.	490.	500.	509.	518.
126.	309.	315.	321.	327.	182.	496.	506.	515.	524.
128.	314.	320.	326.	332.	184.	501.	511.	520.	529.
130.	318.	324.	330.	336.	186.	507.	517.	526.	535.
132.	323.	329.	335.	341.	188.	512.	522.	531.	540.
134.	328.	334.	340.	346.	190.	518.	528.	537.	546.
136.	333.	339.	345.	351.	192.	523.	533.	542.	551.
138.	338.	344.	350.	356.	194.	529.	539.	548.	557.
140.	343.	349.	355.	361.	196.	534.	544.	553.	562.
142.	348.	354.	360.	366.	198.	540.	550.	559.	568.
144.	353.	359.	365.	371.	200.	545.	555.	564.	573.
146.	358.	364.	370.	376.	202.	551.	561.	570.	579.
148.	403.	411.	419.	428.	204.	1041.	1062.	1084.	1105.
150.	408.	417.	425.	433.	206.	1051.	1073.	1094.	1116.
152.	414.	422.	431.	439.	208.	1062.	1083.	1105.	1134.

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	98	100	102	104		98	100	102	104
210	1072	1094	1116	1137	216	1102	1125	1139	1165
212	1082	1104	1114	1140	218	1113	1125	1151	1178
214	1092	1115	1126	1152					
	106	108	110	112		106	108	110	112
108	281				164	755	769	783	797
108	286	292			166	764	778	793	807
110	291	297	302		168	773	787	802	816
112	297	302	308	348	170	782	797	812	826
114	302	308	314	355	172	791	806	821	836
116	307	313	319	361	174	801	816	831	846
118	313	319	324	367	176	810	825	840	855
120	318	324	330	373	178	819	834	849	864
122	323	329	335	380	180	828	843	858	873
124	329	335	341	386	182	837	852	867	882
126	334	340	346	392	184	846	861	876	891
128	339	346	352	398	186	855	870	885	900
130	345	351	357	404	188	864	879	894	909
132	350	356	363	411	190	873	888	903	918
134	355	402	409	417	192	882	897	912	927
136	400	408	415	423	194	891	906	921	936
138	406	414	422	429	196	900	915	930	945
140	412	420	428	436	198	909	924	939	954
142	418	426	434	442	200	918	933	948	963
144	424	432	440	448	202	927	942	957	972
146	430	438	446	454	204	936	951	966	981
148	436	444	452	460	206	945	960	975	990
150	442	450	458	467	208	954	969	984	999
152	448	456	464	473	210	963	978	993	1008
154	453	462	471	479	212	972	987	1002	1017
156	459	468	477	485	214	981	996	1011	1026
158	465	474	483	491	216	990	1005	1020	1035
160	471	480	489	497	218	999	1014	1029	1044
162	477	486	495	503		1008	1023	1038	1053
	114	116	118	120		114	116	118	120
114	361				162	802	817	832	847
116	367	374			164	812	827	842	857
118	374	380	387		166	821	836	851	866
120	380	387	393	400	168	830	845	860	875
122	386	393	400	407	170	839	854	869	884
124	393	400	406	413	172	848	863	878	893
126	399	406	413	420	174	857	872	887	902
128	405	412	420	427	176	866	881	896	911
130	412	419	426	433	178	875	890	905	920
132	418	425	433	440	180	884	899	914	929
134	424	432	439	447	182	893	908	923	938
136	431	438	446	453	184	902	917	932	947
138	437	445	452	460	186	911	926	941	956
140	443	451	459	467	188	920	935	950	965
142	450	457	465	473	190	929	944	959	974
144	456	464	472	480	192	938	953	968	983
146	462	470	479	487	194	947	962	977	992
148	469	477	485	493	196	956	971	986	1001
150	475	483	491	500	198	965	980	995	1010
152	482	490	498	506	200	974	989	1004	1019
154	489	497	505	513	202	983	998	1013	1028
156	495	503	511	519	204	992	1007	1022	1037
158	502	510	518	526	206	1001	1016	1031	1046
160	509	517	525	533	208	1010	1025	1040	1055

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	114	116	118	120		114	116	118	120
210.....	1455.	1480.	1508.	1531.	216.....	1496.	1522.	2212.	2250.
212.....	1469.	1494.	1520.	2208.	218.....	1510.	2195.	2233.	2271.
214.....	1482.	1508.	2192.	2229.					
	122	124	126	128		122	124	126	128
122.....	455.				172.....	1093.	1111.	1317.	1388.
124.....	462.	470.			174.....	1106.	1124.	1332.	1353.
126.....	470.	477.	485.		176.....	1118.	1328.	1347.	1369.
128.....	478.	485.	493.	501.	178.....	1320.	1341.	1363.	1384.
130.....	485.	493.	501.	509.	180.....	1334.	1356.	1378.	1400.
132.....	493.	501.	508.	516.	182.....	1349.	1371.	1393.	1416.
134.....	500.	509.	516.	524.	184.....	1364.	1386.	1409.	1431.
136.....	507.	516.	524.	532.	186.....	1379.	1401.	1424.	1447.
138.....	515.	523.	532.	540.	188.....	1394.	1417.	1439.	1462.
140.....	522.	531.	540.	548.	190.....	1408.	1432.	1455.	1478.
142.....	529.	538.	547.	555.	192.....	1423.	1447.	1470.	1493.
144.....	536.	545.	554.	562.	194.....	1438.	1462.	1485.	1509.
146.....	543.	552.	561.	569.	196.....	1453.	1477.	1501.	1524.
148.....	550.	559.	568.	576.	198.....	1468.	1492.	1516.	1540.
150.....	557.	566.	575.	583.	200.....	1483.	1507.	1531.	1555.
152.....	564.	573.	582.	590.	202.....	1497.	1522.	1546.	1570.
154.....	571.	580.	589.	597.	204.....	1512.	1537.	1561.	1585.
156.....	578.	587.	596.	604.	206.....	1527.	1552.	1576.	1600.
158.....	585.	594.	603.	611.	208.....	1542.	1567.	1591.	1615.
160.....	592.	601.	610.	618.	210.....	1557.	1582.	1606.	1630.
162.....	599.	608.	617.	625.	212.....	1572.	1597.	1621.	1645.
164.....	606.	615.	624.	632.	214.....	1587.	1612.	1636.	1660.
166.....	613.	622.	631.	639.	216.....	1602.	1627.	1651.	1675.
168.....	620.	629.	638.	646.	218.....	1617.	1642.	1666.	1690.
170.....	627.	636.	645.	653.					
172.....	634.	643.	652.	660.					
174.....	641.	650.	659.	667.					
	130	132	134	136		130	132	134	136
130.....	516.				176.....	1390.	1412.	1433.	1454.
132.....	525.	847.			178.....	1406.	1428.	1449.	1471.
134.....	534.	856.	873.		180.....	1422.	1444.	1466.	1487.
136.....	543.	865.	886.	899.	182.....	1438.	1460.	1482.	1504.
138.....	552.	874.	899.	917.	184.....	1453.	1476.	1498.	1521.
140.....	561.	883.	907.	925.	186.....	1469.	1492.	1514.	1536.
142.....	570.	892.	916.	934.	188.....	1485.	1508.	1531.	1553.
144.....	579.	901.	925.	943.	190.....	1501.	1524.	1547.	1569.
146.....	588.	910.	934.	952.	192.....	1517.	1540.	1563.	1585.
148.....	597.	919.	943.	961.	194.....	1532.	1556.	1579.	1601.
150.....	606.	928.	952.	970.	196.....	1548.	1572.	1595.	1617.
152.....	615.	937.	961.	979.	198.....	1564.	1588.	1611.	1633.
154.....	624.	946.	970.	988.	200.....	1580.	1604.	1627.	1649.
156.....	633.	955.	979.	997.	202.....	1596.	1620.	1643.	1665.
158.....	642.	964.	988.	1006.	204.....	1612.	1636.	1659.	1681.
160.....	651.	973.	997.	1025.	206.....	1628.	1652.	1675.	1697.
162.....	660.	982.	1006.	1044.	208.....	1644.	1668.	1691.	1713.
164.....	669.	991.	1015.	1063.	210.....	1660.	1684.	1707.	1729.
166.....	678.	1000.	1024.	1082.	212.....	1676.	1700.	1723.	1745.
168.....	687.	1009.	1033.	1101.	214.....	1692.	1716.	1739.	1761.
170.....	696.	1018.	1042.	1120.	216.....	1708.	1732.	1755.	1777.
172.....	705.	1027.	1051.	1139.	218.....	1724.	1748.	1771.	1793.
174.....	714.	1036.	1060.	1158.					

POLISHED PLATE GLASS—Continued.

LENGTH.	WIDTH.				LENGTH.	WIDTH.			
	138	140	142	144		138	140	142	144
138.....	992.				174.....	1459.	1480.	1716.	1740.
140.....	1006.	1021.			176.....	1476.	1497.	1736.	2200.
142.....	1021.	1035.	1400.		178.....	1493.	1514.	2194.	2225.
144.....	1035.	1050.	1420.	1440.	180.....	1509.	1531.	2219.	2250.
146.....	1049.	1065.	1440.	1460.	182.....	1526.	2212.	2243.	2275.
148.....	1064.	1079.	1460.	1480.	184.....	2204.	2236.	2268.	2300.
150.....	1078.	1094.	1480.	1500.	186.....	2228.	2260.	2293.	2325.
152.....	1092.	1108.	1500.	1520.	188.....	2252.	2285.	2317.	2350.
154.....	1107.	1123.	1519.	1540.	190.....	2276.	2309.	2342.	2375.
156.....	1121.	1137.	1538.	1560.	192.....	2300.	2333.	2367.	2400.
158.....	1135.	1151.	1558.	1580.	194.....	2324.	2358.	2391.	2425.
160.....	1149.	1165.	1578.	1600.	196.....	2348.	2382.	2416.	2450.
162.....	1163.	1179.	1598.	1620.	198.....	2372.	2406.	2441.	2475.
164.....	1177.	1193.	1617.	1640.	200.....	2396.	2431.	2465.	2500.
166.....	1191.	1207.	1637.	1660.	202.....	2420.	2455.	2490.	
168.....	1205.	1221.	1657.	1680.	204.....	2444.	2479.		
170.....	1219.	1235.	1676.	1700.	206.....	2468.			
172.....	1233.	1249.	1696.	1720.	208.....	2492.			

Odd and fractional parts of inches are charged at the price of the next highest even number.

 Our 1-8 POLISHED PLATE is especially adapted for CAR WINDOWS.

PITTSBURGH PLATE GLASS COMPANY,

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WINDOW GLASS.

PER BOX OF 50 SQUARE FEET.

United Inches.	SIZES.	Single Strength.			United Inches.	SIZES.	Double Strength.		
		1st	2d	3d			1st	2d	3d
		AA	A	B			AA	A	B
25	6x 8 to 10x15.....	17.50	16.25	15.50	25	6x 8 to 10x15	23.50	22.00	21.00
34	11x14 } 12x13 } to 14x20.....	20.00	18.50	17.25	34	11x14 } 12x13 } to 14x20.....	28.50	26.25	24.50
40	10x26 to 16x24	22.00	20.00	18.50	40	10x26 to 16x24.....	31.25	28.50	26.25
50	18x22 } 20x20 } to 20x30.	25.00	23.00	21.00	50	18x22 } 20x20 } to 20x30.....	34.50	31.75	28.75
54	15x36 to 24x30	27.00	24.50	22.00	54	15x36 to 24x30... ..	36.50	33.75	30.50
60	26x28 to 24x36.....	30.00	26.75	24.00	60	26x28 to 24x36.....	41.00	37.25	33.75
70	26x34 } 28x32 } 30x30 } to 30x40.....	33.50	30.50	27.00	70	26x34 } 28x32 } 30x30 } to 30x40	47.00	42.75	38.00
80	32x38 } 34x36 } to 30x50.....	40.00	36.50	32.00	80	32x38 } 34x36 } to 30x50	55.00	50.50	45.50
84	30x52 to 30x54.....	41.25	37.50	33.75	84	30x52 to 30x54.....	57.00	51.75	46.50
90	30x56 to 34x56.....				90	30x56 to 34x56.....	59.50	54.00	48.50
94	34x58 to 34x60.....				94	34x58 to 34x60.....	63.00	57.50	52.00
100	36x60 to 40x60.....				100	36x60 to 40x60.....	66.50	60.50	55.00

All sizes of both single and double strength above 52 inches in length, and not making more than 81 united inches, will be charged in the 84 united inches bracket.

Sizes above 100 united inches, \$10.00 per box extra for every five inches.

An additional 10 per cent. will be charged for all glass more than 40 inches wide.

Black figures per light.

WINDOW GLASS.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			
	AA	A	B	AA	A	B	No. Lts. per Box.
6x 8.....	.13	.12	.11	.16	.15	.14	150
7x 9.....	17.50	16.25	15.50	23.50	22.00	21.00	
8x10.....	.16	.15	.14	.21	.20	.19	115
12.....	17.50	16.25	15.50	23.50	22.00	21.00	
13.....	.20	.19	.18	.27	.25	.24	90
14.....	17.50	16.25	15.50	23.50	22.00	21.00	
15.....	.24	.22	.21	.32	.30	.28	75
16.....	17.50	16.25	15.50	23.50	22.00	21.00	
17.....	.26	.24	.23	.35	.32	.31	69
18.....	17.50	16.25	15.50	23.50	22.00	21.00	
19.....	.28	.26	.25	.37	.35	.33	64
20.....	17.50	16.25	15.50	23.50	22.00	21.00	
21.....	.30	.28	.26	.40	.37	.35	60
22.....	17.50	16.25	15.50	23.50	22.00	21.00	
23.....	.32	.30	.28	.42	.40	.38	56
24.....	17.50	16.25	15.50	23.50	22.00	21.00	
25.....	.40	.37	.35	.57	.53	.49	50
26.....	20.00	18.50	17.25	28.50	26.25	24.50	
27.....	.45	.42	.39	.64	.59	.55	45
28.....	20.00	18.50	17.25	28.50	26.25	24.50	
29.....	.24	.23	.22	.33	.31	.29	73
30.....	17.50	16.25	15.50	23.50	22.00	21.00	
31.....	.27	.25	.24	.36	.33	.32	67
32.....	17.50	16.25	15.50	23.50	22.00	21.00	
33.....	.29	.27	.25	.38	.36	.34	62
34.....	17.50	16.25	15.50	23.50	22.00	21.00	
35.....	.31	.29	.28	.42	.39	.37	57
36.....	17.50	16.25	15.50	23.50	22.00	21.00	
37.....	.34	.31	.30	.45	.42	.40	53
38.....	17.50	16.25	15.50	23.50	22.00	21.00	
39.....	.35	.33	.31	.47	.44	.42	50
40.....	17.50	16.25	15.50	23.50	22.00	21.00	
41.....	.45	.42	.39	.64	.59	.55	45
42.....	20.00	18.50	17.25	28.50	26.25	24.50	
43.....	.50	.47	.44	.72	.66	.62	40
44.....	20.00	18.50	17.25	28.50	26.25	24.50	
45.....	.56	.52	.48	.80	.73	.69	36
46.....	20.00	18.50	17.25	28.50	26.25	24.50	
47.....	.30	.28	.26	.40	.37	.35	60
48.....	17.50	16.25	15.50	23.50	22.00	21.00	
49.....	.32	.30	.29	.43	.40	.39	55
50.....	17.50	16.25	15.50	23.50	22.00	21.00	
51.....	.34	.32	.30	.46	.43	.41	52
52.....	17.50	16.25	15.50	23.50	22.00	21.00	
53.....	.37	.34	.33	.49	.46	.44	48
54.....	17.50	16.25	15.50	23.50	22.00	21.00	
55.....	.45	.42	.39	.64	.59	.55	45
56.....	20.00	18.50	17.25	28.50	26.25	24.50	
57.....	.50	.47	.44	.72	.66	.62	40
58.....	20.00	18.50	17.25	28.50	26.25	24.50	
59.....	.53	.49	.46	.75	.70	.65	38
60.....	20.00	18.50	17.25	28.50	26.25	24.50	
61.....	.56	.52	.48	.80	.73	.69	36
62.....	20.00	18.50	17.25	28.50	26.25	24.50	
63.....	.61	.57	.53	.87	.80	.75	33
64.....	20.00	18.50	17.25	28.50	26.25	24.50	
65.....	.67	.62	.58	.95	.88	.82	30
66.....	20.00	18.50	17.25	28.50	26.25	24.50	
67.....	.79	.72	.67	1.12	1.02	.94	28
68.....	22.00	20.00	18.50	31.25	28.50	26.25	
69.....	.85	.77	.72	1.21	1.10	1.01	26
70.....	22.00	20.00	18.50	31.25	28.50	26.25	
71.....	.92	.84	.78	1.31	1.19	1.10	24
72.....	22.00	20.00	18.50	31.25	28.50	26.25	
73.....	1.09	1.00	.92	1.50	1.39	1.25	23
74.....	25.00	23.00	21.00	34.50	31.75	28.75	

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			
	AA	A	B	AA	A	B	No. Lts. per Box.
10x34.....	1.20	1.10	1.00	1.65	1.52	1.37	
.....	25.00	23.00	21.00	34.50	31.75	28.75	21
36.....	1.25	1.15	1.05	1.73	1.59	1.44	
.....	25.00	23.00	21.00	34.50	31.75	28.75	20
38.....	1.32	1.22	1.11	1.82	1.68	1.52	
.....	25.00	23.00	21.00	34.50	31.75	28.75	19
40.....	1.39	1.28	1.17	1.92	1.77	1.60	
.....	25.00	23.00	21.00	34.50	31.75	28.75	18
42.....	1.59	1.45	1.30	2.15	1.99	1.80	
.....	27.00	24.50	22.00	36.50	33.75	30.50	17
44.....	1.69	1.54	1.38	2.29	2.11	1.91	
.....	27.00	24.50	22.00	36.50	33.75	30.50	16
46.....	1.88	1.68	1.50	2.57	2.33	2.11	
.....	30.00	26.75	24.00	41.00	37.25	33.75	16
48.....	2.00	1.79	1.60	2.74	2.49	2.25	
.....	30.00	26.75	24.00	41.00	37.25	33.75	15
50.....	2.15	1.92	1.72	2.93	2.67	2.42	
.....	30.00	26.75	24.00	41.00	37.25	33.75	14
11x12.....	32	30	29	43	40	39	
.....	17.50	16.25	15.50	23.50	22.00	21.00	55
14.....	43	40	37	61	56	53	
.....	20.00	18.50	17.25	28.50	26.25	24.50	47
15.....	46	43	40	65	60	56	
.....	20.00	18.50	17.25	28.50	26.25	24.50	44
16.....	49	46	43	70	65	60	
.....	20.00	18.50	17.25	28.50	26.25	24.50	41
18.....	55	50	47	78	71	67	
.....	20.00	18.50	17.25	28.50	26.25	24.50	37
19.....	59	55	51	84	78	72	
.....	20.00	18.50	17.25	28.50	26.25	24.50	34
20.....	61	57	53	87	80	75	
.....	20.00	18.50	17.25	28.50	26.25	24.50	33
22.....	67	62	58	95	88	82	
.....	20.00	18.50	17.25	28.50	26.25	24.50	30
24.....	82	75	69	1.16	1.06	.98	
.....	22.00	20.00	18.50	31.25	28.50	26.25	27
26.....	88	80	74	1.25	1.14	1.05	
.....	22.00	20.00	18.50	31.25	28.50	26.25	25
28.....	96	87	81	1.36	1.24	1.15	
.....	22.00	20.00	18.50	31.25	28.50	26.25	23
30.....	1.14	1.05	.96	1.57	1.45	1.31	
.....	25.00	23.00	21.00	34.50	31.75	28.75	22
32.....	1.25	1.15	1.05	1.73	1.59	1.44	
.....	25.00	23.00	21.00	34.50	31.75	28.75	20
34.....	1.32	1.22	1.11	1.82	1.68	1.52	
.....	25.00	23.00	21.00	34.50	31.75	28.75	19
36.....	1.39	1.28	1.17	1.92	1.77	1.60	
.....	25.00	23.00	21.00	34.50	31.75	28.75	18
38.....	1.48	1.36	1.24	2.03	1.87	1.70	
.....	25.00	23.00	21.00	34.50	31.75	28.75	17
40.....	1.69	1.54	1.38	2.29	2.11	1.91	
.....	27.00	24.50	22.00	36.50	33.75	30.50	16
42.....	1.69	1.54	1.38	2.29	2.11	1.91	
.....	27.00	24.50	22.00	36.50	33.75	30.50	16
44.....	2.00	1.79	1.60	2.74	2.49	2.25	
.....	30.00	26.75	24.00	41.00	37.25	33.75	15
46.....	2.15	1.92	1.72	2.93	2.67	2.42	
.....	30.00	26.75	24.00	41.00	37.25	33.75	14
48.....	2.15	1.92	1.72	2.93	2.67	2.42	
.....	30.00	26.75	24.00	41.00	37.25	33.75	14
50.....	2.58	2.35	2.08	3.62	3.29	2.93	
.....	33.50	30.50	27.00	47.00	42.75	38.00	13
12x12.....	35	33	31	47	44	42	
.....	17.50	16.25	15.50	23.50	22.00	21.00	50
13.....	44	41	38	62	58	54	
.....	20.00	18.50	17.25	28.50	26.25	24.50	46

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			
	AA	A	B	AA	A	B	No. Lts. per Box.
12x14.....	.47	.44	.41	.67	.62	.57	
15.....	20.00	18.50	17.25	28.50	26.25	24.50	48
16.....	.50	.47	.44	.72	.66	.62	
18.....	20.00	18.50	17.25	28.50	26.25	24.50	40
18.....	.53	.49	.46	.75	.70	.65	
18.....	20.00	18.50	17.25	28.50	26.25	24.50	38
18.....	.59	.55	.51	.84	.78	.72	
19.....	20.00	18.50	17.25	28.50	26.25	24.50	34
19.....	.63	.58	.54	.90	.83	.77	
20.....	20.00	18.50	17.25	28.50	26.25	24.50	32
20.....	.67	.62	.58	.95	.88	.82	
22.....	20.00	18.50	17.25	28.50	26.25	24.50	30
22.....	.75	.69	.64	1.06	.98	.91	
24.....	20.00	18.50	17.25	28.50	26.25	24.50	27
24.....	.88	.80	.74	1.25	1.14	1.05	
26.....	22.00	20.00	18.50	31.25	28.50	26.25	25
26.....	.96	.87	.81	1.36	1.24	1.15	
28.....	22.00	20.00	18.50	31.25	28.50	26.25	23
28.....	1.00	.91	.85	1.43	1.30	1.20	
30.....	22.00	20.00	18.50	31.25	28.50	26.25	22
30.....	1.25	1.15	1.05	1.73	1.59	1.44	
32.....	25.00	23.00	21.00	34.50	31.75	28.75	20
32.....	1.32	1.22	1.11	1.82	1.68	1.52	
34.....	25.00	23.00	21.00	34.50	31.75	28.75	19
34.....	1.39	1.28	1.17	1.92	1.77	1.60	
36.....	25.00	23.00	21.00	34.50	31.75	28.75	18
36.....	1.48	1.36	1.24	2.03	1.87	1.70	
38.....	25.00	23.00	21.00	34.50	31.75	28.75	17
38.....	1.57	1.44	1.32	2.16	1.99	1.80	
40.....	25.00	23.00	21.00	34.50	31.75	28.75	16
40.....	1.80	1.64	1.47	2.44	2.25	2.04	
42.....	27.00	24.50	22.00	36.50	33.75	30.50	15
42.....	1.93	1.75	1.58	2.61	2.42	2.18	
44.....	27.00	24.50	22.00	36.50	33.75	30.50	14
44.....	2.15	1.92	1.72	2.93	2.67	2.42	
46.....	30.00	26.75	24.00	41.00	37.25	33.75	14
46.....	2.31	2.06	1.85	3.16	2.87	2.60	
48.....	30.00	26.75	24.00	41.00	37.25	33.75	13
48.....	2.31	2.06	1.85	3.16	2.87	2.60	
50.....	30.00	26.75	24.00	41.00	37.25	33.75	13
50.....	2.80	2.55	2.25	3.92	3.57	3.17	
52.....	33.50	30.50	27.00	47.00	42.75	38.00	12
52.....	2.80	2.55	2.25	3.92	3.57	3.17	
54.....	33.50	30.50	27.00	47.00	42.75	38.00	12
54.....	3.75	3.41	3.07	5.19	4.71	4.23	
56.....	41.25	37.50	33.75	57.00	51.75	46.50	11
56.....	3.75	3.41	3.07	5.19	4.71	4.23	
58.....	41.25	37.50	33.75	57.00	51.75	46.50	11
58.....	4.13	3.75	3.38	5.70	5.18	4.65	
60.....	41.25	37.50	33.75	57.00	51.75	46.50	10
60.....	4.13	3.75	3.38	5.70	5.18	4.65	
13x15.....	41.25	37.50	33.75	57.00	51.75	46.50	10
13x15.....	.55	.50	.47	.78	.71	.67	
16.....	20.00	18.50	17.25	28.50	26.25	24.50	37
16.....	.58	.53	.50	.82	.75	.70	
18.....	20.00	18.50	17.25	28.50	26.25	24.50	35
18.....	.65	.60	.56	.92	.85	.80	
20.....	20.00	18.50	17.25	28.50	26.25	24.50	31
20.....	.72	.67	.62	1.02	.94	.88	
22.....	20.00	18.50	17.25	28.50	26.25	24.50	28
22.....	.88	.80	.74	1.25	1.14	1.05	
24.....	22.00	20.00	18.50	31.25	28.50	26.25	25
24.....	.96	.87	.81	1.36	1.24	1.15	
26.....	22.00	20.00	18.50	31.25	28.50	26.25	23
26.....	1.05	.96	.89	1.49	1.36	1.25	
28.....	22.00	20.00	18.50	31.25	28.50	26.25	21

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
13x28.....	1.25	1.15	1.05	1.73	1.59	1.44	
30.....	25.00	23.00	21.00	34.50	31.75	28.75	20
32.....	1.32	1.22	1.11	1.82	1.68	1.52	
34.....	25.00	23.00	21.00	34.50	31.75	28.75	19
36.....	1.48	1.36	1.24	2.03	1.87	1.70	
38.....	25.00	23.00	21.00	34.50	31.75	28.75	17
40.....	1.57	1.44	1.32	2.16	1.99	1.80	
42.....	25.00	23.00	21.00	34.50	31.75	28.75	16
44.....	1.67	1.54	1.40	2.30	2.12	1.92	
46.....	25.00	23.00	21.00	34.50	31.75	28.75	15
48.....	1.80	1.64	1.47	2.44	2.25	2.04	
50.....	27.00	24.50	22.00	36.50	33.75	30.50	15
52.....	1.93	1.75	1.58	2.61	2.42	2.18	
54.....	27.00	24.50	22.00	36.50	33.75	30.50	14
56.....	2.31	2.06	1.85	3.16	2.87	2.60	
58.....	30.00	28.75	24.00	41.00	37.25	33.75	13
60.....	2.31	2.06	1.85	3.16	2.87	2.60	
62.....	30.00	28.75	24.00	41.00	37.25	33.75	13
64.....	2.50	2.23	2.00	3.42	3.11	2.82	
66.....	30.00	28.75	24.00	41.00	37.25	33.75	12
68.....	2.80	2.55	2.25	3.92	3.57	3.17	
70.....	33.50	30.50	27.00	47.00	42.75	38.00	12
72.....	3.05	2.78	2.46	4.28	3.89	3.46	
74.....	33.50	30.50	27.00	47.00	42.75	38.00	11
14x14.....	.55	.50	.47	.78	.71	.67	
16.....	20.00	18.50	17.25	28.50	26.25	24.50	37
18.....	.63	.58	.54	.90	.83	.77	
20.....	20.00	18.50	17.25	28.50	26.25	24.50	32
22.....	.69	.64	.60	.99	.91	.85	
24.....	20.00	18.50	17.25	28.50	26.25	24.50	29
26.....	.77	.72	.67	1.10	1.01	.95	
28.....	20.00	18.50	17.25	28.50	26.25	24.50	26
30.....	.92	.84	.78	1.31	1.19	1.10	
32.....	22.00	20.00	18.50	31.25	28.50	26.25	24
34.....	1.00	.91	.85	1.43	1.30	1.20	
36.....	22.00	20.00	18.50	31.25	28.50	26.25	22
38.....	1.10	1.00	.93	1.57	1.43	1.32	
40.....	22.00	20.00	18.50	31.25	28.50	26.25	20
42.....	1.32	1.22	1.11	1.82	1.68	1.52	
44.....	25.00	23.00	21.00	34.50	31.75	28.75	19
46.....	1.48	1.36	1.24	2.03	1.87	1.70	
48.....	25.00	23.00	21.00	34.50	31.75	28.75	17
50.....	1.57	1.44	1.32	2.16	1.99	1.80	
52.....	25.00	23.00	21.00	34.50	31.75	28.75	16
54.....	1.67	1.54	1.40	2.30	2.12	1.92	
56.....	25.00	23.00	21.00	34.50	31.75	28.75	15
58.....	1.79	1.65	1.50	2.47	2.27	2.06	
60.....	25.00	23.00	21.00	34.50	31.75	28.75	14
62.....	1.93	1.75	1.58	2.61	2.42	2.18	
64.....	27.00	24.50	22.00	36.50	33.75	30.50	14
66.....	2.08	1.89	1.70	2.81	2.60	2.35	
68.....	27.00	24.50	22.00	36.50	33.75	30.50	13
70.....	2.50	2.23	2.00	3.42	3.11	2.82	
72.....	30.00	28.75	24.00	41.00	37.25	33.75	12
74.....	2.50	2.23	2.00	3.42	3.11	2.82	
76.....	30.00	28.75	24.00	41.00	37.25	33.75	12
78.....	2.73	2.44	2.19	3.73	3.39	3.07	
80.....	30.00	28.75	24.00	41.00	37.25	33.75	11
82.....	3.05	2.78	2.46	4.28	3.89	3.46	
84.....	33.50	30.50	27.00	47.00	42.75	38.00	11
86.....	3.35	3.05	2.70	4.70	4.28	3.80	
88.....	33.50	30.50	27.00	47.00	42.75	38.00	10
90.....	3.35	3.05	2.70	4.70	4.28	3.80	
92.....	33.50	30.50	27.00	47.00	42.75	38.00	10
94.....	4.13	3.75	3.38	5.70	5.18	4.65	
96.....	41.25	37.50	33.75	57.00	51.75	46.50	10

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
14x56.....	4.59	4.17	3.75	6.34	5.75	5.17	
.....	41.25	37.50	33.75	57.00	51.75	46.50	9
58.....	4.59	4.17	3.75	6.34	5.75	5.17	
.....	41.25	37.50	33.75	57.00	51.75	46.50	9
60.....	4.59	4.17	3.75	6.34	5.75	5.17	
.....	41.25	37.50	33.75	57.00	51.75	46.50	9
15x15.....	63	58	54	90	83	77	
.....	20.00	18.50	17.25	28.50	26.25	24.50	32
16.....	67	62	58	95	88	82	
.....	20.00	18.50	17.25	28.50	26.25	24.50	30
18.....	75	69	64	1.06	98	91	
.....	20.00	18.50	17.25	28.50	26.25	24.50	27
20.....	92	84	78	1.31	1.19	1.10	
.....	22.00	20.00	18.50	31.25	28.50	26.25	24
22.....	1.00	.91	.85	1.43	1.30	1.20	
.....	22.00	20.00	18.50	31.25	28.50	26.25	22
24.....	1.10	1.00	.93	1.57	1.43	1.32	
.....	22.00	20.00	18.50	31.25	28.50	26.25	20
26.....	1.32	1.22	1.11	1.82	1.68	1.52	
.....	25.00	23.00	21.00	34.50	31.75	28.75	19
28.....	1.48	1.36	1.24	2.03	1.87	1.70	
.....	25.00	23.00	21.00	34.50	31.75	28.75	17
30.....	1.57	1.44	1.32	2.16	1.99	1.80	
.....	25.00	23.00	21.00	34.50	31.75	28.75	16
32.....	1.67	1.54	1.40	2.30	2.12	1.92	
.....	25.00	23.00	21.00	34.50	31.75	28.75	15
34.....	1.79	1.65	1.50	2.47	2.27	2.06	
.....	25.00	23.00	21.00	34.50	31.75	28.75	14
36.....	2.08	1.89	1.70	2.81	2.60	2.35	
.....	27.00	24.50	22.00	36.50	33.75	30.50	13
38.....	2.08	1.89	1.70	2.81	2.60	2.35	
.....	27.00	24.50	22.00	36.50	33.75	30.50	13
40.....	2.50	2.23	2.00	3.42	3.11	2.82	
.....	30.00	26.75	24.00	41.00	37.25	33.75	12
42.....	2.73	2.44	2.19	3.73	3.39	3.07	
.....	30.00	26.75	24.00	41.00	37.25	33.75	11
44.....	2.73	2.44	2.19	3.73	3.39	3.07	
.....	30.00	26.75	24.00	41.00	37.25	33.75	11
46.....	3.35	3.05	2.70	4.70	4.28	3.80	
.....	33.50	30.50	27.00	47.00	42.75	38.00	10
48.....	3.35	3.05	2.70	4.70	4.28	3.80	
.....	33.50	30.50	27.00	47.00	42.75	38.00	10
50.....	3.35	3.05	2.70	4.70	4.28	3.80	
.....	33.50	30.50	27.00	47.00	42.75	38.00	10
16x16.....	72	67	62	1.02	94	88	
.....	20.00	18.50	17.25	28.50	26.25	24.50	28
18.....	80	74	69	1.14	1.05	.98	
.....	20.00	18.50	17.25	28.50	26.25	24.50	25
20.....	96	87	81	1.36	1.24	1.15	
.....	22.00	20.00	18.50	31.25	28.50	26.25	23
22.....	1.05	.96	.89	1.49	1.36	1.25	
.....	22.00	20.00	18.50	31.25	28.50	26.25	21
24.....	1.16	1.06	.98	1.65	1.50	1.39	
.....	22.00	20.00	18.50	31.25	28.50	26.25	19
26.....	1.48	1.36	1.24	2.03	1.87	1.70	
.....	25.00	23.00	21.00	34.50	31.75	28.75	17
28.....	1.57	1.44	1.32	2.16	1.99	1.80	
.....	25.00	23.00	21.00	34.50	31.75	28.75	16
30.....	1.67	1.54	1.40	2.30	2.12	1.92	
.....	25.00	23.00	21.00	34.50	31.75	28.75	15
32.....	1.79	1.65	1.50	2.47	2.27	2.06	
.....	25.00	23.00	21.00	34.50	31.75	28.75	14
34.....	1.93	1.77	1.62	2.66	2.45	2.22	
.....	25.00	23.00	21.00	34.50	31.75	28.75	13
36.....	2.08	1.89	1.70	2.81	2.60	2.35	
.....	27.00	24.50	22.00	36.50	33.75	30.50	13

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
16x38.....	2.25	2.05	1.84	3.05	2.82	2.55	
.....	27.00	24.50	22.00	36.50	33.75	30.50	12
40.....	2.73	2.44	2.19	3.73	3.39	3.07	
.....	30.00	26.75	24.00	41.00	37.25	33.75	11
42.....	2.73	2.44	2.19	3.73	3.39	3.07	
.....	30.00	26.75	24.00	41.00	37.25	33.75	11
44.....	3.00	2.68	2.40	4.10	3.73	3.38	
.....	30.00	26.75	24.00	41.00	37.25	33.75	10
46.....	3.35	3.05	2.70	4.70	4.28	3.80	
.....	33.50	30.50	27.00	47.00	42.75	38.00	10
48.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
50.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
52.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
54.....				7.13	6.47	5.82	
.....				57.00	51.75	46.50	8
56.....				7.13	6.47	5.82	
.....				57.00	51.75	46.50	8
58.....				7.13	6.47	5.82	
.....				57.00	51.75	46.50	8
60.....				7.13	6.47	5.82	
.....				57.00	51.75	46.50	8
62.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
64.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
66.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
68.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
70.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
72.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
74.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
76.....				10.50	9.59	8.67	
.....				63.00	57.50	52.00	6
18x18.....	1.00	.91	.85	1.43	1.30	1.20	
.....	22.00	20.00	18.50	31.25	28.50	26.25	22
20.....	1.10	1.00	.93	1.57	1.43	1.32	
.....	22.00	20.00	18.50	31.25	28.50	26.25	20
22.....	1.39	1.28	1.17	1.92	1.77	1.60	
.....	25.00	23.00	21.00	34.50	31.75	28.75	18
24.....	1.48	1.36	1.24	2.03	1.87	1.70	
.....	25.00	23.00	21.00	34.50	31.75	28.75	17
26.....	1.57	1.44	1.32	2.16	1.99	1.80	
.....	25.00	23.00	21.00	34.50	31.75	28.75	16
28.....	1.79	1.65	1.50	2.47	2.27	2.06	
.....	25.00	23.00	21.00	34.50	31.75	28.75	14
30.....	1.79	1.65	1.50	2.47	2.27	2.06	
.....	25.00	23.00	21.00	34.50	31.75	28.75	14
32.....	1.93	1.77	1.62	2.66	2.45	2.22	
.....	25.00	23.00	21.00	34.50	31.75	28.75	13
34.....	2.25	2.05	1.84	3.05	2.82	2.55	
.....	27.00	24.50	22.00	36.60	33.75	30.50	12
36.....	2.46	2.23	2.00	3.32	3.07	2.78	
.....	27.00	24.50	22.00	36.50	33.75	30.50	11
38.....	2.73	2.44	2.19	3.73	3.39	3.07	
.....	30.00	26.75	24.00	41.00	37.25	33.75	11
40.....	3.00	2.68	2.40	4.10	3.73	3.38	
.....	30.00	26.75	24.00	41.00	37.25	33.75	10
42.....	3.00	2.68	2.40	4.10	3.73	3.38	
.....	30.00	26.75	24.00	41.00	37.25	33.75	10

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
18x44.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
46.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
48.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
50.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
52.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
54.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
56.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
58.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
60.....				8.15	7.40	6.65	
.....				57.00	51.75	46.50	7
62.....				9.50	8.63	7.75	
.....				57.00	51.75	46.50	6
64.....				9.50	8.63	7.75	
.....				57.00	51.75	46.50	6
66.....				9.50	8.63	7.75	
.....				57.00	51.75	46.50	6
68.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
70.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
72.....				9.92	9.00	8.09	
.....				59.50	54.00	48.50	6
74.....				12.60	11.50	10.40	
.....				63.00	57.50	52.00	5
76.....				12.60	11.50	10.40	
.....				63.00	57.50	52.00	5
20x20.....	1.39	1.28	1.17	1.92	1.77	1.60	
.....	25.00	23.00	21.00	34.50	31.75	28.75	18
22.....	1.57	1.44	1.32	2.16	1.99	1.80	
.....	25.00	23.00	21.00	34.50	31.75	28.75	16
24.....	1.67	1.54	1.40	2.30	2.12	1.92	
.....	25.00	23.00	21.00	34.50	31.75	28.75	15
26.....	1.79	1.65	1.50	2.47	2.27	2.06	
.....	25.00	23.00	21.00	34.50	31.75	28.75	14
28.....	1.93	1.77	1.62	2.66	2.45	2.22	
.....	25.00	23.00	21.00	34.50	31.75	28.75	13
30.....	2.09	1.92	1.75	2.88	2.65	2.40	
.....	25.00	23.00	21.00	34.50	31.75	28.75	12
32.....	2.46	2.23	2.00	3.32	3.07	2.78	
.....	27.00	24.50	22.00	36.50	33.75	30.50	11
24.....	2.46	2.23	2.00	3.32	3.07	2.78	
.....	27.00	24.50	22.00	36.50	33.75	30.50	11
36.....	3.00	2.68	2.40	4.10	3.73	3.38	
.....	30.00	28.75	24.00	41.00	37.25	33.75	10
38.....	3.00	2.68	2.40	4.10	3.73	3.38	
.....	30.00	28.75	24.00	41.00	37.25	33.75	10
40.....	3.34	2.98	2.67	4.56	4.14	3.75	
.....	30.00	28.75	24.00	41.00	37.25	33.75	9
42.....	3.73	3.39	3.00	5.23	4.75	4.23	
.....	33.50	30.50	27.00	47.00	42.75	38.00	9
44.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
46.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
48.....	4.19	3.82	3.38	5.88	5.35	4.75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
50.....	4.79	4.36	3.86	6.72	6.11	5.43	
.....	33.50	30.50	27.00	47.00	42.75	38.00	7

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box
	AA	A	B	AA	A	B	
20x52.....	5.72 40.00	5.22 36.50	4.58 32.00	7.86 55.00	7.22 50.50	6.50 45.50	7
54.....				8.15 57.00	7.40 51.75	6.65 46.50	7
56.....				9.50 57.00	8.63 51.75	7.75 46.50	6
58.....				9.50 57.00	8.63 51.75	7.75 46.50	6
60.....				9.50 57.00	8.63 51.75	7.75 46.50	6
62.....				9.50 57.00	8.63 51.75	7.75 46.50	6
64.....				9.50 57.00	8.63 51.75	7.75 46.50	6
66.....				11.90 59.50	10.80 54.00	9.70 48.50	5
68.....				11.90 59.50	10.80 54.00	9.70 48.50	5
70.....				11.90 59.50	10.80 54.00	9.70 48.50	5
72.....				12.60 63.00	11.50 57.50	10.40 52.00	5
74.....				12.60 63.00	11.50 57.50	10.40 52.00	5
76.....				13.30 66.50	12.10 60.50	11.00 55.00	5
78.....				16.63 66.50	15.13 60.50	13.75 55.00	4
80.....				16.63 66.50	15.13 60.50	13.75 55.00	4
82.....				19.13 76.50	17.63 70.50	16.25 65.00	4
84.....				19.13 76.50	17.63 70.50	16.25 65.00	4
86.....				21.63 86.50	20.13 80.50	18.75 75.00	4
88.....				21.63 86.50	20.13 80.50	18.75 75.00	4
90.....				21.63 86.50	20.13 80.50	18.75 75.00	4
22x22.....	1.67 25.00	1.54 23.00	1.40 21.00	2.30 34.50	2.12 31.75	1.92 28.75	15
24.....	1.79 25.00	1.65 23.00	1.50 21.00	2.47 34.50	2.27 31.75	2.06 28.75	14
26.....	1.93 25.00	1.77 23.00	1.62 21.00	2.66 34.50	2.45 31.75	2.22 28.75	13
28.....	2.09 25.00	1.92 23.00	1.75 21.00	2.88 34.50	2.65 31.75	2.40 28.75	12
30.....	2.46 27.00	2.23 24.50	2.00 22.00	3.32 36.50	3.07 33.75	2.78 30.50	11
32.....	2.70 27.00	2.45 24.50	2.20 22.00	3.65 36.50	3.38 33.75	3.05 30.50	10
34.....	3.00 30.00	2.68 26.75	2.40 24.00	4.10 41.00	3.73 37.25	3.38 33.75	10
36.....	3.34 30.00	2.98 26.75	2.67 24.00	4.56 41.00	4.14 37.25	3.75 33.75	9
38.....	3.34 30.00	2.98 26.75	2.67 24.00	4.56 41.00	4.14 37.25	3.75 33.75	9
40.....	4.19 33.50	3.82 30.50	3.38 27.00	5.88 47.00	5.35 42.75	4.75 38.00	8
42.....	4.19 33.50	3.82 30.50	3.38 27.00	5.88 47.00	5.35 42.75	4.75 38.00	8
44.....	4.79 33.50	4.36 30.50	3.86 27.00	6.72 47.00	6.11 42.75	5.43 38.00	7
46.....	4.79 33.50	4.36 30.50	3.86 27.00	6.72 47.00	6.11 42.75	5.43 38.00	7

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			
	AA	A	B	AA	A	B	No. Lts. per Box.
22x48.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33.50	30.50	27.00	47.00	42.75	38.00	7
50.....	5 72	5 22	4 58	7 86	7 22	6 50	
.....	40.00	36.50	32.00	55.00	50.50	45.50	7
52.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40.00	36.50	32.00	55.00	50.50	45.50	6
54.....				9 50	8 63	7 75	
.....				57.00	51.75	46.50	6
56.....				9 50	8 63	7 75	
.....				57.00	51.75	46.50	6
58.....				9 50	8 63	7 75	
.....				57.00	51.75	46.50	6
60.....				11 40	10 35	9 30	
.....				57.00	51.75	46.50	5
62.....				11 40	10 35	9 30	
.....				57.00	51.75	46.50	5
64.....				11 90	10 80	9 70	
.....				59.50	54.00	48.50	5
66.....				11 90	10 80	9 70	
.....				59.50	54.00	48.50	5
68.....				11 90	10 80	9 70	
.....				59.50	54.00	48.50	5
70.....				12 60	11 50	10 40	
.....				63.00	57.50	52.00	5
72.....				12 60	11 50	10 40	
.....				63.00	57.50	52.00	5
74.....				16 63	15 13	13 75	
.....				68.50	60.50	55.00	4
76.....				16 63	15 13	13 75	
.....				68.50	60.50	55.00	4
78.....				16 63	15 13	13 75	
.....				68.50	60.50	55.00	4
80.....				19 13	17 63	16 25	
.....				76.50	70.50	65.00	4
82.....				19 13	17 63	16 25	
.....				76.50	70.50	65.00	4
84.....				21 63	20 13	18 75	
.....				86.50	80.50	75.00	4
86.....				21 63	20 13	18 75	
.....				86.50	80.50	75.00	4
88.....				21 63	20 13	18 75	
.....				86.50	80.50	75.00	4
90.....				24 13	22 63	21 75	
.....				96.50	90.50	85.00	4
24x24.....	2 09	1 92	1 75	2 88	2 65	2 40	
.....	25.00	23.00	21.00	34.50	31.75	28.75	12
26.....	2 09	1 92	1 75	2 88	2 65	2 40	
.....	25.00	23.00	21.00	34.50	31.75	28.75	12
28.....	2 46	2 23	2 00	3 32	3 07	2 78	
.....	27.00	24.50	22.00	36.50	33.75	30.50	11
30.....	2 70	2 45	2 20	3 65	3 38	3 05	
.....	27.00	24.50	22.00	36.50	33.75	30.50	10
32.....	3 00	2 68	2 40	4 10	3 73	3 38	
.....	30.00	26.75	24.00	41.00	37.25	33.75	10
34.....	3 34	2 98	2 67	4 56	4 14	3 75	
.....	30.00	26.75	24.00	41.00	37.25	33.75	9
36.....	3 34	2 98	2 67	4 56	4 14	3 75	
.....	30.00	26.75	24.00	41.00	37.25	33.75	9
38.....	4 19	3 82	3 38	5 88	5 35	4 75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
40.....	4 19	3 82	3 38	5 88	5 35	4 75	
.....	33.50	30.50	27.00	47.00	42.75	38.00	8
42.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33.50	30.50	27.00	47.00	42.75	38.00	7
44.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33.50	30.50	27.00	47.00	42.75	38.00	7

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
24x48	4.79	4.36	3.86	6.72	6.11	5.43	
48	33.50	30.50	27.00	47.00	42.75	38.00	7
50	6.67	6.09	5.34	9.17	8.42	7.59	
52	40.00	36.50	32.00	55.00	50.50	45.50	6
54	6.67	6.09	5.34	9.17	8.42	7.59	
56	40.00	36.50	32.00	55.00	50.50	45.50	6
58	6.67	6.09	5.34	9.17	8.42	7.59	
60	40.00	36.50	32.00	55.00	50.50	45.50	6
62	6.88	6.25	5.63	9.50	8.63	7.75	
64	41.25	37.50	33.75	57.00	51.75	46.50	6
66	8.25	7.50	6.75	11.40	10.35	9.30	
68	41.25	37.50	33.75	57.00	51.75	46.50	5
70	8.25	7.50	6.75	11.40	10.35	9.30	
72	41.25	37.50	33.75	57.00	51.75	46.50	5
74	8.25	7.50	6.75	11.40	10.35	9.30	
76	41.25	37.50	33.75	57.00	51.75	46.50	5
78	11.90	10.80	9.70	11.90	10.80	9.70	
80	59.50	54.00	48.50	59.50	54.00	48.50	5
82	11.90	10.80	9.70	11.90	10.80	9.70	
84	59.50	54.00	48.50	59.50	54.00	48.50	5
86	15.75	14.38	13.00	15.75	14.38	13.00	
88	63.00	57.50	52.00	63.00	57.50	52.00	4
90	15.75	14.38	13.00	15.75	14.38	13.00	
92	63.00	57.50	52.00	63.00	57.50	52.00	4
94	16.63	15.13	13.75	16.63	15.13	13.75	
96	66.50	60.50	55.00	66.50	60.50	55.00	4
98	16.63	15.13	13.75	16.63	15.13	13.75	
100	66.50	60.50	55.00	66.50	60.50	55.00	4
102	19.13	17.63	16.25	19.13	17.63	16.25	
104	78.50	70.50	65.00	78.50	70.50	65.00	4
106	19.13	17.63	16.25	19.13	17.63	16.25	
108	78.50	70.50	65.00	78.50	70.50	65.00	4
110	21.63	20.13	18.75	21.63	20.13	18.75	
112	88.50	80.50	75.00	88.50	80.50	75.00	4
114	21.63	20.13	18.75	21.63	20.13	18.75	
116	88.50	80.50	75.00	88.50	80.50	75.00	4
118	28.84	26.84	25.00	28.84	26.84	25.00	
120	88.50	80.50	75.00	88.50	80.50	75.00	3
122	32.17	30.17	28.34	32.17	30.17	28.34	
124	88.50	80.50	75.00	88.50	80.50	75.00	3
126	32.17	30.17	28.34	32.17	30.17	28.34	
128	88.50	80.50	75.00	88.50	80.50	75.00	3
26x26	2.46	2.23	2.00	3.32	3.07	2.78	
28	27.00	24.50	22.00	38.50	33.75	30.50	11
30	3.00	2.68	2.40	4.10	3.73	3.38	
32	30.00	26.75	24.00	41.00	37.25	33.75	10
34	3.34	2.98	2.67	4.56	4.14	3.75	
36	30.00	26.75	24.00	41.00	37.25	33.75	9
38	3.34	2.98	2.67	4.56	4.14	3.75	
40	30.00	26.75	24.00	41.00	37.25	33.75	9
42	4.19	3.82	3.38	5.88	5.35	4.75	
44	33.50	30.50	27.00	47.00	42.75	38.00	8
46	4.19	3.82	3.38	5.88	5.35	4.75	
48	33.50	30.50	27.00	47.00	42.75	38.00	8
50	4.79	4.36	3.86	6.72	6.11	5.43	
52	33.50	30.50	27.00	47.00	42.75	38.00	7
54	4.79	4.36	3.86	6.72	6.11	5.43	
56	33.50	30.50	27.00	47.00	42.75	38.00	7
58	4.79	4.36	3.86	6.72	6.11	5.43	
60	33.50	30.50	27.00	47.00	42.75	38.00	7
62	5.59	5.09	4.50	7.84	7.13	6.34	
64	33.50	30.50	27.00	47.00	42.75	38.00	6

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
28x46.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40 00	38 50	32 00	55 00	50 50	45 50	6
48.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40 00	38 50	32 00	55 00	50 50	45 50	6
50.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40 00	38 50	32 00	55 00	50 50	45 50	6
52.....	8 00	7 30	6 40	11 00	10 10	9 10	
.....	40 00	38 50	32 00	55 00	50 50	45 50	5
54.....				11 40	10 35	9 30	
.....				57 00	51 75	46 50	5
56.....				11 40	10 35	9 30	
.....				57 00	51 75	46 50	5
58.....				11 40	10 35	9 30	
.....				57 00	51 75	46 50	5
60.....				11 90	10 80	9 70	
.....				59 50	54 00	48 50	5
62.....				14 88	13 50	12 13	
.....				59 50	54 00	48 50	4
64.....				14 88	13 50	12 13	
.....				59 50	54 00	48 50	4
66.....				15 75	14 38	13 00	
.....				63 00	57 70	52 00	4
68.....				15 75	14 38	13 00	
.....				63 00	57 50	52 00	4
70.....				16 63	15 13	13 75	
.....				66 50	60 50	55 00	4
72.....				16 63	15 13	13 75	
.....				66 50	60 50	55 00	4
74.....				16 63	15 13	13 75	
.....				66 50	60 50	55 00	4
76.....				19 13	17 63	16 25	
.....				76 50	70 50	65 00	4
78.....				19 13	17 63	16 25	
.....				76 50	70 50	65 00	4
80.....				28 84	26 84	25 00	
.....				88 50	80 50	75 00	3
82.....				28 84	26 84	25 00	
.....				88 50	80 50	75 00	3
84.....				28 84	26 84	25 00	
.....				88 50	80 50	75 00	3
86.....				32 17	30 17	28 34	
.....				98 50	90 50	85 00	3
88.....				32 17	30 17	28 34	
.....				98 50	90 50	85 00	3
90.....				35 50	33 50	31 67	
.....				106 50	100 50	95 00	3
28x28.....	3 34	2 98	2 67	4 56	4 14	3 75	
.....	30 00	28 75	24 00	41 00	37 25	33 75	9
30.....	3 34	2 98	2 67	4 56	4 14	3 75	
.....	30 00	28 75	24 00	41 00	37 25	33 75	9
32.....	4 19	3 82	3 38	5 88	5 35	4 75	
.....	33 50	30 50	27 00	47 00	42 75	38 00	8
34.....	4 19	3 82	3 38	5 88	5 35	4 75	
.....	33 50	30 50	27 00	47 00	42 75	38 00	8
36.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33 50	30 50	27 00	47 00	42 75	38 00	7
38.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33 50	30 50	27 00	47 00	42 75	38 00	7
40.....	4 79	4 36	3 86	6 72	6 11	5 43	
.....	33 50	30 50	27 00	47 00	42 75	38 00	7
42.....	5 59	5 09	4 50	7 84	7 13	6 34	
.....	33 50	30 50	27 00	47 00	42 75	38 00	6
44.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40 00	38 50	32 00	55 00	50 50	45 50	6
46.....	6 67	6 09	5 34	9 17	8 42	7 59	
.....	40 00	38 50	32 00	55 00	50 50	45 50	6

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
28x48	8.00	7.30	6.40	11.00	10.10	9.10	
50	40.00	38.50	32.00	55.00	50.50	45.50	5
52	8.00	7.30	6.40	11.00	10.10	9.10	
54	40.00	38.50	32.00	55.00	50.50	45.50	5
56	8.25	7.50	6.75	11.40	10.35	9.30	
58	41.25	37.50	33.75	57.00	51.75	46.50	5
60	8.25	7.50	6.75	11.40	10.35	9.30	
62	41.25	37.50	33.75	57.00	51.75	46.50	5
64	14.88			14.88	13.50	12.13	
66	59.50			59.50	54.00	48.50	4
68	14.88			14.88	13.50	12.13	
70	59.50			59.50	54.00	48.50	4
72	14.88			14.88	13.50	12.13	
74	59.50			59.50	54.00	48.50	4
76	15.75			15.75	14.38	13.00	
78	63.00			63.00	57.50	52.00	4
80	15.75			15.75	14.38	13.00	
82	63.00			63.00	57.50	52.00	4
84	16.63			16.63	15.13	13.75	
86	66.50			66.50	60.50	55.00	4
88	16.63			16.63	15.13	13.75	
90	66.50			66.50	60.50	55.00	4
92	25.50			25.50	23.50	21.67	
94	76.50			76.50	70.50	65.00	3
96	25.50			25.50	23.50	21.67	
98	76.50			76.50	70.50	65.00	3
100	28.84			28.84	26.84	25.00	
102	86.50			86.50	80.50	75.00	3
104	28.84			28.84	26.84	25.00	
106	86.50			86.50	80.50	75.00	3
108	32.17			32.17	30.17	28.34	
110	96.50			96.50	90.50	85.00	3
112	32.17			32.17	30.17	28.34	
114	96.50			96.50	90.50	85.00	3
116	35.50			35.50	33.50	31.67	
118	106.50			106.50	100.50	95.00	3
120	35.50			35.50	33.50	31.67	
122	106.50			106.50	100.50	95.00	3
30x30	4.19	3.82	3.38	5.88	5.35	4.75	
32	33.50	30.50	27.00	47.00	42.75	38.00	8
34	4.79	4.36	3.86	6.72	6.11	5.43	
36	33.50	30.50	27.00	47.00	42.75	38.00	7
38	4.79	4.36	3.86	6.72	6.11	5.43	
40	33.50	30.50	27.00	47.00	42.75	38.00	7
42	4.79	4.36	3.86	6.72	6.11	5.43	
44	33.50	30.50	27.00	47.00	42.75	38.00	7
46	5.59	5.09	4.50	7.84	7.13	6.34	
48	33.50	30.50	27.00	47.00	42.75	38.00	6
50	6.67	6.09	5.34	9.17	8.42	7.59	
52	40.00	38.50	32.00	55.00	50.50	45.50	6
54	6.67	6.09	5.34	9.17	8.42	7.59	
56	40.00	38.50	32.00	55.00	50.50	45.50	6
58	8.00	7.30	6.40	11.00	10.10	9.10	
60	40.00	38.50	32.00	55.00	50.50	45.50	5
62	8.00	7.30	6.40	11.00	10.10	9.10	
64	40.00	38.50	32.00	55.00	50.50	45.50	5
66	8.00	7.30	6.40	11.00	10.10	9.10	
68	40.00	38.50	32.00	55.00	50.50	45.50	5

Black figures per light

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
30x52	8.25	7.50	6.75	11.40	10.35	9.30	
	41.25	37.50	33.75	57.00	51.75	46.50	5
54	10.32	9.38	8.44	14.25	12.94	11.63	
	41.25	37.50	33.75	57.00	51.75	46.50	4
56				14.88	13.50	12.13	
				59.50	54.00	48.50	4
58				14.88	13.50	12.13	
				59.50	54.00	48.50	4
60				14.88	13.50	12.13	
				59.50	54.00	48.50	4
62				15.75	14.38	13.00	
				63.00	57.50	52.00	4
64				15.75	14.38	13.00	
				63.00	57.50	52.00	4
66				16.63	15.13	13.75	
				66.50	60.50	55.00	4
68				16.63	15.13	13.75	
				66.50	60.50	55.00	4
70				22.17	20.17	18.34	
				66.50	60.50	55.00	3
72				25.50	23.50	21.67	
				76.50	70.50	65.00	3
74				25.50	23.50	21.67	
				76.50	70.50	65.00	3
76				28.84	26.84	25.00	
				86.50	80.50	75.00	3
78				28.84	26.84	25.00	
				86.50	80.50	75.00	3
80				28.84	26.84	25.00	
				86.50	80.50	75.00	3
82				32.17	30.17	28.34	
				96.50	90.50	85.00	3
84				32.17	30.17	28.34	
				96.50	90.50	85.00	3
86				35.50	33.50	31.67	
				106.50	100.50	95.00	3
88				35.50	33.50	31.67	
				106.50	100.50	95.00	3
90				35.50	33.50	31.67	
				106.50	100.50	95.00	3
32x32	4.79	4.36	3.86	6.72	6.11	5.43	
	33.50	30.50	27.00	47.00	42.75	38.00	7
34	4.79	4.36	3.86	6.72	6.11	5.43	
	33.50	30.50	27.00	47.00	42.75	38.00	7
36	5.59	5.09	4.50	7.84	7.13	6.34	
	33.50	30.50	27.00	47.00	42.75	38.00	6
38	6.67	6.09	5.34	9.17	8.42	7.59	
	40.00	36.50	32.00	55.00	50.50	45.50	6
40	6.67	6.09	5.34	9.17	8.42	7.59	
	40.00	36.50	32.00	55.00	50.50	45.50	6
42	6.67	6.09	5.34	9.17	8.42	7.59	
	40.00	36.50	32.00	55.00	50.50	45.50	6
44	8.00	7.30	6.40	11.00	10.10	9.10	
	40.00	36.50	32.00	55.00	50.50	45.50	5
46	8.00	7.30	6.40	11.00	10.10	9.10	
	40.00	36.50	32.00	55.00	50.50	45.50	5
48	8.00	7.30	6.40	11.00	10.10	9.10	
	40.00	36.50	32.00	55.00	50.50	45.50	5
50	8.25	7.50	6.75	11.40	10.35	9.30	
	41.25	37.50	33.75	57.00	51.75	46.50	5
52	10.32	9.38	8.44	14.25	12.94	11.63	
	41.25	37.50	33.75	57.00	51.75	46.50	4
54				14.88	13.50	12.13	
				59.50	54.00	48.50	4
56				14.88	13.50	12.13	
				59.50	54.00	48.50	4

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
32x58				14.88	13.50	12.13	
60				59.50	54.00	48.50	4
62				15.75	14.38	13.00	
64				63.00	57.50	52.00	4
66				15.75	14.38	13.00	
68				63.00	57.50	52.00	4
70				16.63	15.13	13.75	
72				66.50	60.50	55.00	4
74				22.17	20.17	18.34	
76				66.50	60.50	55.00	3
78				22.17	20.17	18.34	
80				66.50	60.50	55.00	3
82				25.50	23.50	21.67	
84				76.50	70.50	65.00	3
86				25.50	23.50	21.67	
88				76.50	70.50	65.00	3
90				28.84	26.84	25.00	
92				86.50	80.50	75.00	3
94				28.84	26.84	25.00	
96				86.50	80.50	75.00	3
98				28.84	26.84	25.00	
100				86.50	80.50	75.00	3
102				32.17	30.17	28.34	
104				96.50	90.50	85.00	3
106				32.17	30.17	28.34	
108				96.50	90.50	85.00	3
110				35.50	33.50	31.67	
112				106.50	100.50	95.00	3
114				35.50	33.50	31.67	
116				106.50	100.50	95.00	3
34x34	5.59	5.09	4.50	7.84	7.13	6.34	
36	33.50	30.50	27.00	47.00	42.75	38.00	6
38	6.67	6.09	5.34	9.17	8.42	7.59	
40	40.00	36.50	32.00	55.00	50.50	45.50	6
42	6.67	6.09	5.34	9.17	8.42	7.59	
44	40.00	36.50	32.00	55.00	50.50	45.50	6
46	6.67	6.09	5.34	9.17	8.42	7.59	
48	40.00	36.50	32.00	55.00	50.50	45.50	6
50	8.00	7.30	6.40	11.00	10.10	9.10	
52	40.00	36.50	32.00	55.00	50.50	45.50	5
54	8.00	7.30	6.40	11.00	10.10	9.10	
56	40.00	36.50	32.00	55.00	50.50	45.50	5
58	8.00	7.30	6.40	11.00	10.10	9.10	
60	40.00	36.50	32.00	55.00	50.50	45.50	5
62	8.25	7.50	6.75	11.40	10.35	9.30	
64	41.25	37.50	33.75	57.00	51.75	46.50	5
66	10.32	9.38	8.44	14.25	12.94	11.63	
68	41.25	37.50	33.75	57.00	51.75	46.50	4
70				14.88	13.50	12.13	
72				59.50	54.00	48.50	4
74				14.88	13.50	12.13	
76				59.50	54.00	48.50	4
78				14.88	13.50	12.13	
80				59.50	54.00	48.50	4
82				15.75	14.38	13.00	
84				63.00	57.50	52.00	4
86				15.75	14.38	13.00	
88				63.00	57.50	52.00	4
90				22.17	20.17	18.34	
92				66.50	60.50	55.00	3
94				22.17	20.17	18.34	
96				66.50	60.50	55.00	3
98				22.17	20.17	18.34	
100				66.50	60.50	55.00	3
102				25.50	23.50	21.67	
104				76.50	70.50	65.00	3

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	SINGLE.			DOUBLE.			No. Lts. per Box.
	AA	A	B	AA	A	B	
34x70.....				25.50	23.50	21.67	
72.....				76.50	70.50	65.00	3
74.....				28.84	26.84	25.00	
76.....				86.50	80.50	75.00	3
78.....				28.84	26.84	25.00	
80.....				86.50	80.50	75.00	3
82.....				28.84	26.84	25.00	
84.....				86.50	80.50	75.00	3
86.....				32.17	30.17	28.34	
36x36.....				96.50	90.50	85.00	3
38.....				32.17	30.17	28.34	
40.....				96.50	90.50	85.00	3
42.....				35.50	33.50	31.67	
44.....				106.50	100.50	95.00	3
46.....				35.50	33.50	31.67	
48.....				106.50	100.50	95.00	3
50.....				35.50	33.50	31.67	
52.....				106.50	100.50	95.00	3
36x36.....	6.67	6.09	5.34	9.17	8.42	7.59	
38.....	40.00	36.50	32.00	55.00	50.50	45.50	6
40.....	8.00	7.30	6.40	11.00	10.10	9.10	
42.....	40.00	36.50	32.00	55.00	50.50	45.50	5
44.....	8.00	7.30	6.40	11.00	10.10	9.10	
46.....	40.00	36.50	32.00	55.00	50.50	45.50	5
48.....	8.00	7.30	6.40	11.00	10.10	9.10	
50.....	40.00	36.50	32.00	55.00	50.50	45.50	5
52.....	8.00	7.30	6.40	11.00	10.10	9.10	
54.....	40.00	36.50	32.00	55.00	50.50	45.50	5
56.....	8.00	7.30	6.40	11.00	10.10	9.10	
58.....	40.00	36.50	32.00	55.00	50.50	45.50	5
60.....	8.00	7.30	6.40	11.00	10.10	9.10	
62.....	40.00	36.50	32.00	55.00	50.50	45.50	5
64.....	8.00	7.30	6.40	11.00	10.10	9.10	
66.....	40.00	36.50	32.00	55.00	50.50	45.50	5
68.....	8.00	7.30	6.40	11.00	10.10	9.10	
70.....	40.00	36.50	32.00	55.00	50.50	45.50	5
72.....	8.00	7.30	6.40	11.00	10.10	9.10	
74.....	40.00	36.50	32.00	55.00	50.50	45.50	5
76.....	8.00	7.30	6.40	11.00	10.10	9.10	
78.....	40.00	36.50	32.00	55.00	50.50	45.50	5
80.....	8.00	7.30	6.40	11.00	10.10	9.10	
82.....	40.00	36.50	32.00	55.00	50.50	45.50	5
84.....	8.00	7.30	6.40	11.00	10.10	9.10	
86.....	40.00	36.50	32.00	55.00	50.50	45.50	5
88.....	8.00	7.30	6.40	11.00	10.10	9.10	
90.....	40.00	36.50	32.00	55.00	50.50	45.50	5
92.....	8.00	7.30	6.40	11.00	10.10	9.10	
94.....	40.00	36.50	32.00	55.00	50.50	45.50	5
96.....	8.00	7.30	6.40	11.00	10.10	9.10	
98.....	40.00	36.50	32.00	55.00	50.50	45.50	5
100.....	8.00	7.30	6.40	11.00	10.10	9.10	

SIZES.	DOUBLE.				SIZES.	DOUBLE.			
	AA	A	B	No. Lts. per Box.		AA	A	B	No. Lts. per Box.
36x54.....	14.88	13.50	12.13		36x76.....	32.17	30.17	28.34	
56.....	59.50	54.00	48.50	4	78.....	96.50	90.50	85.00	3
58.....	15.75	14.38	13.00		80.....	32.17	30.17	28.34	
60.....	63.00	57.50	52.00	4	82.....	96.50	90.50	85.00	3
62.....	21.00	19.17	17.34		84.....	35.50	33.50	31.67	
64.....	63.00	57.50	52.00	3	86.....	106.50	100.50	95.00	3
66.....	22.17	20.17	18.34		88.....	35.50	33.50	31.67	
68.....	66.50	60.50	55.00	3	90.....	106.50	100.50	95.00	3
70.....	22.17	20.17	18.34		92.....	35.50	33.50	31.67	
72.....	66.50	60.50	55.00	3	94.....	106.50	100.50	95.00	3
74.....	22.17	20.17	18.34		96.....	35.50	33.50	31.67	
76.....	66.50	60.50	55.00	3	98.....	106.50	100.50	95.00	3
78.....	22.17	20.17	18.34		100.....	35.50	33.50	31.67	
80.....	66.50	60.50	55.00	3	38x38.....	11.00	10.10	9.10	
82.....	22.17	20.17	18.34		40.....	55.00	50.50	45.50	5
84.....	66.50	60.50	55.00	3	42.....	11.00	10.10	9.10	
86.....	22.17	20.17	18.34		44.....	55.00	50.50	45.50	5
88.....	66.50	60.50	55.00	3	46.....	14.25	12.94	11.63	
90.....	22.17	20.17	18.34		48.....	57.00	51.75	46.50	4
92.....	66.50	60.50	55.00	3	50.....	14.25	12.94	11.63	
94.....	22.17	20.17	18.34		52.....	57.00	51.75	46.50	4
96.....	66.50	60.50	55.00	3					
98.....	22.17	20.17	18.34						
100.....	66.50	60.50	55.00	3					

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	DOUBLE.				SIZES.	DOUBLE.			
	AA	A	B	No. Lts. per Box.		AA	A	B	No. Lts. per Box.
38x48.....	14.88	13.50	12.13		40x66.....	28.84	26.84	25.00	
50.....	59.50	54.00	48.50	4	68.....	86.50	80.50	75.00	3
52.....	14.88	13.50	12.13		70.....	28.84	26.84	25.00	
54.....	59.50	54.00	48.50	4	72.....	86.50	80.50	75.00	3
56.....	14.88	13.50	12.13		74.....	28.84	26.84	25.00	
58.....	59.50	54.00	48.50	4	76.....	86.50	80.50	75.00	3
60.....	15.75	14.38	13.00		78.....	32.17	30.17	28.34	
62.....	63.00	57.50	52.00	4	80.....	96.50	90.50	85.00	3
64.....	21.00	19.17	17.34		82.....	32.17	30.17	28.34	
66.....	63.00	57.50	52.00	3	84.....	96.50	90.50	85.00	3
68.....	22.17	20.17	18.34		86.....	35.50	33.50	31.67	
70.....	66.50	60.50	55.00	3	88.....	106.50	100.50	95.00	3
72.....	22.17	20.17	18.34		90.....	35.50	33.50	31.67	
74.....	66.50	60.50	55.00	3	92.....	106.50	100.50	95.00	3
76.....	22.17	20.17	18.34		94.....	35.50	33.50	31.67	
78.....	66.50	60.50	55.00	3	96.....	106.50	100.50	95.00	3
80.....	25.50	23.50	21.67		98.....	38.84	36.84	35.00	
82.....	76.50	70.50	65.00	3	100.....	116.50	110.50	105.00	3
84.....	25.50	23.50	21.67		102.....	38.84	36.84	35.00	
86.....	76.50	70.50	65.00	3	104.....	116.50	110.50	105.00	3
88.....	28.84	26.84	25.00		106.....	38.84	36.84	35.00	
90.....	86.50	80.50	75.00	3	108.....	116.50	110.50	105.00	3
92.....	28.84	26.84	25.00		110.....	15.68	14.24	12.79	
94.....	86.50	80.50	75.00	3	112.....	62.70	56.93	51.15	4
96.....	28.84	26.84	25.00		114.....	16.37	14.85	13.34	
98.....	86.50	80.50	75.00	3	116.....	65.45	59.40	53.35	4
100.....	32.17	30.17	28.34		118.....	16.37	14.85	13.34	
102.....	96.50	90.50	85.00	3	120.....	65.45	59.40	53.35	4
104.....	32.17	30.17	28.34		122.....	23.10	21.09	19.07	
106.....	96.50	90.50	85.00	3	124.....	69.30	63.25	57.20	3
108.....	35.50	33.50	31.67		126.....	23.10	21.09	19.07	
110.....	106.50	100.50	95.00	3	128.....	69.30	63.25	57.20	3
112.....	35.50	33.50	31.67		130.....	24.39	22.19	20.17	
114.....	106.50	100.50	95.00	3	132.....	73.15	66.55	60.50	3
116.....	35.50	33.50	31.67		134.....	24.39	22.19	20.17	
118.....	106.50	100.50	95.00	3	136.....	73.15	66.55	60.50	3
120.....	38.84	36.84	35.00		138.....	28.05	25.85	23.84	
122.....	116.50	110.50	105.00	3	140.....	84.15	77.55	71.50	3
124.....	38.84	36.84	35.00		142.....	28.05	25.85	23.84	
126.....	116.50	110.50	105.00	3	144.....	84.15	77.55	71.50	3
128.....	11.00	10.10	9.10		146.....	31.72	29.52	27.50	
130.....	55.00	50.50	45.50	5	148.....	95.15	88.55	82.50	3
132.....	14.25	12.94	11.63		150.....	31.72	29.52	27.50	
134.....	57.00	51.75	46.50	4	152.....	95.15	88.55	82.50	3
136.....	14.25	12.94	11.63		154.....	31.72	29.52	27.50	
138.....	57.00	51.75	46.50	4	156.....	95.15	88.55	82.50	3
140.....	14.88	13.50	12.13		158.....	31.72	29.52	27.50	
142.....	59.50	54.00	48.50	4	160.....	95.15	88.55	82.50	3
144.....	14.88	13.50	12.13		162.....	35.39	33.19	31.17	
146.....	59.50	54.00	48.50	4	164.....	106.15	99.55	93.50	3
148.....	14.88	13.50	12.13		166.....	35.39	33.19	31.17	
150.....	59.50	54.00	48.50	4	168.....	106.15	99.55	93.50	3
152.....	21.00	19.17	17.34		170.....	39.05	36.85	34.84	
154.....	63.00	57.50	52.00	3	172.....	117.15	110.55	104.50	3
156.....	21.00	19.17	17.34		174.....	39.05	36.85	34.84	
158.....	63.00	57.50	52.00	3	176.....	117.15	110.55	104.50	3
160.....	22.17	20.17	18.34		178.....	39.05	36.85	34.84	
162.....	66.50	60.50	55.00	3	180.....	117.15	110.55	104.50	3
164.....	22.17	20.17	18.34		182.....	42.72	40.52	38.50	
166.....	66.50	60.50	55.00	3	184.....	128.15	121.55	115.50	3
168.....	22.17	20.17	18.34		186.....	16.37	14.85	13.34	
170.....	66.50	60.50	55.00	3	188.....	65.45	59.40	53.35	4
172.....	25.50	23.50	21.67		190.....	16.37	14.85	13.34	
174.....	76.50	70.50	65.00	3	192.....	65.45	59.40	53.35	4
176.....	25.50	23.50	21.67		194.....	23.10	21.09	19.07	
178.....	76.50	70.50	65.00	3	196.....	69.30	63.25	57.20	3

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	DOUBLE.				SIZES.	DOUBLE.			
	AA	A	B	No. Lts. per Box.		AA	A	B	No. Lts. per Box.
44x50.....	23 10	21 09	19 07		46x80.....	46 39	44 19	42 17	
.....	69 30	63 25	57 20	3	.....	139 15	132 55	126 50	3
52.....	24 39	22 19	20 17		48x48.....	24 39	22 19	20 17	
.....	73 15	66 55	60 50	3	.....	73 15	66 55	60 50	3
54.....	24 39	22 19	20 17		50.....	24 39	22 19	20 17	
.....	73 15	66 55	60 50	3	.....	73 15	66 55	60 50	3
56.....	24 39	22 19	20 17		52.....	24 39	22 19	20 17	
.....	73 15	66 55	60 50	3	.....	73 15	66 55	60 50	3
58.....	28 05	25 85	23 84		54.....	28 05	25 85	23 84	
.....	84 15	77 55	71 50	3	.....	84 15	77 55	71 50	3
60.....	28 05	25 85	23 84		56.....	28 05	25 85	23 84	
.....	84 15	77 55	71 50	3	.....	84 15	77 55	71 50	3
62.....	31 72	29 52	27 50		58.....	31 72	29 52	27 50	
.....	95 15	88 55	82 50	3	.....	95 15	88 55	82 50	3
64.....	31 72	29 52	27 50		60.....	31 72	29 52	27 50	
.....	95 15	88 55	82 50	3	.....	95 15	88 55	82 50	3
66.....	31 72	29 52	27 50		62.....	31 72	29 52	27 50	
.....	95 15	88 55	82 50	3	.....	95 15	88 55	82 50	3
68.....	35 39	33 19	31 17		64.....	35 39	33 19	31 17	
.....	106 15	99 55	93 50	3	.....	106 15	99 55	93 50	3
70.....	35 39	33 19	31 17		66.....	35 39	33 19	31 17	
.....	106 15	99 55	93 50	3	.....	106 15	99 55	93 50	3
72.....	39 05	36 85	34 84		68.....	39 05	36 85	34 84	
.....	117 15	110 55	104 50	3	.....	117 15	110 55	104 50	3
74.....	39 05	36 85	34 84		70.....	39 05	36 85	34 84	
.....	117 15	110 55	104 50	3	.....	117 15	110 55	104 50	3
76.....	39 05	36 85	34 84		72.....	39 05	36 85	34 84	
.....	117 15	110 55	104 50	3	.....	117 15	110 55	104 50	3
78.....	42 72	40 52	38 50		74.....	42 72	40 52	38 50	
.....	128 15	121 55	115 50	3	.....	128 15	121 55	115 50	3
80.....	42 72	40 52	38 50		76.....	42 72	40 52	38 50	
.....	128 15	121 55	115 50	3	.....	128 15	121 55	115 50	3
46x48.....	23 10	21 09	19 07		78.....	46 39	44 19	42 17	
.....	69 30	63 25	57 20	3	.....	139 15	132 55	126 50	3
48.....	23 10	21 09	19 07		80.....	46 39	44 19	42 17	
.....	69 30	63 25	57 20	3	.....	139 15	132 55	126 50	3
50.....	24 39	22 19	20 17		50x50.....	24 39	22 19	20 17	
.....	73 15	66 55	60 50	3	.....	73 15	66 55	60 50	3
52.....	24 39	22 19	20 17		.....	28 05	25 85	23 84	
.....	73 15	66 55	60 50	3	.....	84 15	77 55	71 50	3
54.....	24 39	22 19	20 17		.....	28 05	25 85	23 84	
.....	73 15	66 55	60 50	3	.....	84 15	77 55	71 50	3
56.....	28 05	25 85	23 84		56.....	31 72	29 52	27 50	
.....	84 15	77 55	71 50	3	.....	95 15	88 55	82 50	3
58.....	28 05	25 85	23 84		.....	31 72	29 52	27 50	
.....	84 15	77 55	71 50	3	.....	95 15	88 55	82 50	3
60.....	31 72	29 52	27 50		60.....	31 72	29 52	27 50	
.....	95 15	88 55	82 50	3	.....	95 15	88 55	82 50	3
62.....	31 72	29 52	27 50		62.....	35 39	33 19	31 17	
.....	95 15	88 55	82 50	3	.....	106 15	99 55	93 50	3
64.....	31 72	29 52	27 50		64.....	35 39	33 19	31 17	
.....	95 15	88 55	82 50	3	.....	106 15	99 55	93 50	3
66.....	35 39	33 19	31 17		66.....	39 05	36 85	34 84	
.....	106 15	99 55	93 50	3	.....	117 15	110 55	104 50	3
68.....	35 39	33 19	31 17		68.....	39 05	36 85	34 84	
.....	106 15	99 55	93 50	3	.....	117 15	110 55	104 50	3
70.....	39 05	36 85	34 84		70.....	39 05	36 85	34 84	
.....	117 15	110 55	104 50	3	.....	117 15	110 55	104 50	3
72.....	39 05	36 85	34 84		72.....	42 72	40 52	38 50	
.....	117 15	110 55	104 50	3	.....	128 15	121 55	115 50	3
74.....	39 05	36 85	34 84		74.....	42 72	40 52	38 50	
.....	117 15	110 55	104 50	3	.....	128 15	121 55	115 50	3
76.....	42 72	40 52	38 50		52x52.....	28 05	25 85	23 84	
.....	128 15	121 55	115 50	3	.....	84 15	77 55	71 50	3
78.....	42 72	40 52	38 50		54.....	31 72	29 52	27 50	
.....	128 15	121 55	115 50	3	.....	95 15	88 55	82 50	3

Black figures per light.

WINDOW GLASS—Continued.

Light figures per box 50 ft.

SIZES.	DOUBLE.				SIZES.	DOUBLE.			
	AA	A	B	No. Lts. per Box.		AA	A	B	No. Lts. per Box.
52x56.....	31.72	29.52	27.50		56x80.....	39.05	36.85	34.84	
.....	95.15	88.55	82.50	3	.....	117.15	110.55	104.50	3
58.....	31.72	29.52	27.50		62.....	39.05	36.85	34.84	
.....	95.15	88.55	82.50	3	.....	117.15	110.55	104.50	3
60.....	35.39	33.19	31.17		64.....	39.05	36.85	34.84	
.....	106.15	99.55	93.50	3	.....	117.15	110.55	104.50	3
62.....	35.39	33.19	31.17		66.....	42.72	40.52	38.50	
.....	106.15	99.55	93.50	3	.....	128.15	121.55	115.50	3
64.....	39.05	36.85	34.84		68.....	42.72	40.52	38.50	
.....	117.15	110.55	104.50	3	.....	128.15	121.55	115.50	3
66.....	39.05	36.85	34.84		70.....	46.39	44.19	42.17	
.....	117.15	110.55	104.50	3	.....	139.15	132.55	126.50	3
68.....	39.05	36.85	34.84		72.....	46.39	44.19	42.17	
.....	117.15	110.55	104.50	3	.....	139.15	132.55	126.50	3
70.....	42.72	40.52	38.50		58x58.....	39.05	36.85	34.84	
.....	128.15	121.55	115.50	3	.....	117.15	110.55	104.50	3
72.....	42.72	40.52	38.50		60.....	39.05	36.85	34.84	
.....	128.15	121.55	115.50	3	.....	117.15	110.55	104.50	3
54x54.....	31.72	29.52	27.50		62.....	39.05	36.85	34.84	
.....	95.15	88.55	82.50	3	.....	117.15	110.55	104.50	3
56.....	31.72	29.52	27.50		64.....	42.72	40.52	38.50	
.....	95.15	88.55	82.50	3	.....	128.15	121.55	115.50	3
58.....	35.39	33.19	31.17		66.....	42.72	40.52	38.50	
.....	106.15	99.55	93.50	3	.....	128.15	121.55	115.50	3
60.....	35.39	33.19	31.17		68.....	46.39	44.19	42.17	
.....	106.15	99.55	93.50	3	.....	139.15	132.55	126.50	3
62.....	39.05	36.85	34.84		70.....	46.39	44.19	42.17	
.....	117.15	110.55	104.50	3	.....	139.15	132.55	126.50	3
64.....	39.05	36.85	34.84		72.....	46.39	44.19	42.17	
.....	117.15	110.55	104.50	3	.....	139.15	132.55	126.50	3
66.....	39.05	36.85	34.84		60x80.....	39.05	36.85	34.84	
.....	117.15	110.55	104.50	3	.....	117.15	110.55	104.50	3
68.....	42.72	40.52	38.50		62.....	42.72	40.52	38.50	
.....	128.15	121.55	115.50	3	.....	128.15	121.55	115.50	3
70.....	42.72	40.52	38.50		64.....	42.72	40.52	38.50	
.....	128.15	121.55	115.50	3	.....	128.15	121.55	115.50	3
72.....	46.39	44.19	42.17		66.....	46.39	44.19	42.17	
.....	139.15	132.55	126.50	3	.....	139.15	132.55	126.50	3
56x56.....	35.39	33.19	31.17		68.....	46.39	44.19	42.17	
.....	106.15	99.55	93.50	3	.....	139.15	132.55	126.50	3
58.....	35.39	33.19	31.17		70.....	46.39	44.19	42.17	
.....	106.15	99.55	93.50	3	.....	139.15	132.55	126.50	3

CHACE'S REGULAR CAN SCREWS.

The $\frac{1}{2}$ -Inch, $\frac{3}{4}$ -Inch and 1-Inch are packed $\frac{1}{2}$ -Gross to Box; $1\frac{1}{4}$ -Inch $\frac{1}{2}$ Gross to Box; $1\frac{1}{2}$ -Inch $\frac{1}{4}$ Gross to Box; $1\frac{3}{4}$ -Inch and 2-Inch $\frac{1}{8}$ Gross to Box.

DIMENSIONS.				ZINC, POLISHED, No LINING.		BRASS, DIPPED, No LINING.		ZINC, POLISHED, SCORED.		NO FLANGE ON OUTSIDE CAP.			
										ZINC, POLISHED, CORK LINING.		ZINC, POLISHED, WAX PAPER LINING.	
TRADE NAME.	Opening in Top.	Opening in Bottom.	Height Over All.	Stock No.	Price Per Gross.	Stock No.	Price Per Gross.	Stock No.	Price Per Gross.	Stock No.	Price Per Gross.	Stock No.	Price Per Gross.
$\frac{1}{2}$ inch.....	$\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$	1	4.00	8	4.50	3064	4.00	910	4.75	3068	4.25
$\frac{3}{4}$ inch.....	$\frac{5}{8}$	$1\frac{3}{8}$	$1\frac{1}{8}$	2	4.50	9	5.50	3065	4.50	262	5.50	1806	4.75
1 inch.....	$\frac{7}{8}$	$1\frac{1}{2}$	$\frac{7}{8}$	3	6.00	10	7.50	292	6.00	263	7.25	2621	6.30
$1\frac{1}{4}$ inch.....	$1\frac{1}{8}$	$1\frac{3}{4}$	1	4	8.00	11	10.00	302	8.00	784	9.50	3069	8.30
$1\frac{1}{2}$ inch.....	$1\frac{5}{8}$	$2\frac{1}{8}$	$1\frac{3}{4}$	5	12.00	12	13.00	301	12.00	785	13.75	3070	12.30
$1\frac{3}{4}$ inch.....	$1\frac{7}{8}$	$2\frac{1}{2}$	$1\frac{7}{8}$	6	16.00	13	17.00	1572	16.00	3066	18.75	3071	16.30
2 inch.....	$1\frac{7}{8}$	$2\frac{3}{4}$	$1\frac{7}{8}$	7	20.00	14	21.00	1573	20.00	3067	23.25	3072	20.30

PRICE LIST VITRIFIED, SALT-GLAZED SEWER PIPE.

2	2 INCH, per foot..... .14 Weight Elbows, Bends or Curves..... .40 per foot, Branches, 2 feet long..... .63 6 LBS. Trap..... 1.00	8 INCH, per foot..... .45 Weight Elbows, Bends or Curves..... 1.80 per foot, Branches, 2 feet long..... 2.03 24 LBS. Traps..... 5.50	18 INCH, per foot..... 1.70 Weight Elbows, Bends or Curves..... 6.50 per foot, Branches, 2 feet long..... 7.65 84 LBS. Traps.....
3	3 INCH, per foot..... .16 Weight Elbows, Bends or Curves..... .50 per foot, Branches, 2 feet long..... .72 7 LBS. Traps..... 1.50	9 INCH, per foot..... .55 Weight Elbows, Bends or Curves..... 2.25 per foot, Branches, 2 feet long..... 2.48 28 LBS. Traps..... 6.50	20 INCH, per foot..... 2.25 Weight Elbows, Bends or Curves..... 7.50 per foot, Branches, 2 feet long..... 10.13 109 LBS. Traps.....
4	4 INCH, per foot..... .20 Weight Elbows, Bends or Curves..... .65 per foot, Branches, 2 feet long..... .90 10 LBS. Traps..... 2.00	10 INCH, per foot..... .65 Weight Elbows, Bends or Curves..... 2.75 per foot, Branches, 2 feet long..... 2.93 31 LBS. Traps..... 7.50	21 INCH, per foot..... 2.50 Weight Elbows, Bends or Curves..... 8.25 per foot, Branches, 2 feet long..... 11.25 118 LBS. Traps.....
5	5 INCH, per foot..... .25 Weight Elbows, Bends or curves..... .85 per foot, Branches, 2 feet long..... 1.13 13 LBS. Traps..... 2.50	12 INCH, per foot..... .85 Weight Elbows, Bends or Curves..... 3.50 per foot, Branches, 2 feet long..... 3.83 42 LBS. Traps..... 10.00	22 INCH, per foot..... 2.75 Weight Elbows, Bends or Curves..... 9.00 per foot, Branches, 2 feet long..... 12.38 122 LBS. Traps.....
6	6 INCH, per foot..... .30 Weight Elbows, Bends or Curves..... 1.10 per foot, Branches, 2 feet long..... 1.35 16 LBS. Traps..... 3.50	15 INCH, per foot..... 1.25 Weight Elbows, Bends or Curves..... 4.75 per foot, Branches, 2 feet long..... 5.63 62 LBS. Traps..... 15.00	24 INCH, per foot..... 3.25 Weight Elbows, Bends or Curves..... 11.00 per foot, Branches, 2 feet long..... 14.63 136 LBS. Traps.....

SLANTS, 50 per cent. more than plain pipe, measured on long side.

INCREASERS, pipe with socket on small end, and REDUCERS, with socket on large end, each at price of four feet of pipe size of large end.

....SUPPLIES....

—FOR—

Railroad, Steamships, Mills, Mines,

Factories, Machine Shops,

and Contractors.



**SOUTHERN RAILWAY
SUPPLY COMPANY.**

Corner Cary and Ninth Streets,

RICHMOND,

VIRGINIA.



Roofing Materials a Specialty.

CAST IRON SOIL PIPE AND FITTINGS.

Adopted January 1, 1894.

Single Hub—Per Foot.

Double Hub—Per Length of Five Feet.

SIZE OF PIPE.	LIGHT.	MEDIUM.	EXTRA HEAVY.	SIZE OF PIPE.	LIGHT.	MEDIUM.	EXTRA HEAVY.
2 inch.....	.24	.32	.35	2 inch.....	1.50	1.85	2.05
3 inch.....	.30	.50	.55	3 inch.....	1.80	2.75	3.05
4 inch.....	.40	.68	.75	4 inch.....	2.30	3.65	4.05
5 inch.....	.50	.90	1.00	5 inch.....	2.80	4.80	5.30
6 inch.....	.60	1.05	1.20	6 inch.....	3.30	5.55	6.30
7 inch.....	1.00	1.55	1.75	7 inch.....	5.75	8.75	9.75
8 inch.....	1.25	1.90	2.25	8 inch.....	7.25	11.75	12.75
10 inch.....	2.00	2.65	3.00	10 inch.....	13.00	.....	20.00
12 inch.....	3.00	.....	4.00				
15 inch.....	4.50						

Quarter, Fifth, Sixth, Eighth and Sixteenth Bends.

SIZE OF PIPE.....	2	3	4	5	6
Light.....	.40	.55	.75	1.00	1.20
Medium.....	.45	.65	.90	1.25	1.60
Extra heavy.....	.50	.70	1.10	1.35	1.75
SIZE OF PIPE.....	7	8	10	12	15
Light.....	2.25	3.00	4.00	6.00	10.00
Extra heavy.....	3.00	4.00	5.00	8.00	

Bends with Inlet on Side or Heel.

SIZE OF PIPE.....	2	3	4	4	5
SIZE OF INLET.....	2	2	2	3	2
Light.....	.90	1.05	1.25	1.35	1.50
Medium.....	.95	1.15	1.40	1.50	1.75
Extra heavy.....	1.00	1.20	1.60	1.75	1.85
SIZE OF PIPE.....	5	6	6	6	8
SIZE OF INLET.....	3	2	3	4	4
Light.....	1.60	1.70	1.80	1.95	3.75
Medium.....	1.85	2.10	2.20	2.35	4.25
Extra heavy.....	1.95	2.25	2.35	2.50	4.75

We make Bends with Side or Heel Inlet up to 15 inches.

Quarter and Eighth Double Hub Bends.

SIZE OF PIPE.....	2	3	4	5	6
Light.....	.70	.85	.95	1.30	1.50
Medium.....	.75	.95	1.25	1.50	1.85
Extra heavy.....	.80	1.00	1.40	1.65	2.05

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Long Curve or Sanitary Bends.

SIZE OF PIPE.	LIGHT.	MEDIUM.	EXTRA HEAVY.
2 inch .....	.80	.90	1.25
3 inch	1.25	1.60	2.00
4 inch	1.75	2.00	2.75
5 inch	3.00	3.50	4.00
6 inch	4.00	4.75	5.50

Long Bends.

SIZE OF PIPE.....	2	3	4	5	6	8
Light.....	.80	1.25	1.50	2.25	2.50	5.50
Medium.....	1.10	1.60	2.00	2.75	3.25	6.25
Extra Heavy.....	1.25	1.90	2.25	3.00	5.50	7.00

4 inch Bend made Flange or Hub End.

Return Bends—Single Hub.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2 inch .....	.65	.75
3 inch .....	.85	1.10
4 inch	1.25	1.75
5 inch	2.00	2.50
6 inch	3.00	3.50

Return Bends—Double Hub.

4 inch Pipe..... 1.50

Return Bend Hub or Spigot Back Outlet.

4 inch, light..... 1.75

Triple L.

4 inch, light..... 2.75

Double L.

4 inch, light..... 2.00

Three-Way Branch Hub Outlet.

4 inch..... 2.75

CAST IRON SOIL PIPE AND FITTINGS—Continued.

T, Sanitary T, Y and Half Y Branches.

SIZE OF PIPE.....	2x2	8x8, 8x2	4x4, 4x3, 4x2
Light.....	.60	.80	1.20
Medium.....	.70	1.05	1.50
Extra Heavy.....	.80	1.25	1.80
SIZE OF PIPE.....	5x5, 5x4, 5x3, 5x2	6x6, 6x5, 6x4, 6x3, 6x2	
Light.....	1.60	2.00	
Medium.....	2.00	2.75	
Extra Heavy.....	2.25	3.25	
SIZE OF PIPE.....	7x7, 7x6, 7x5, 7x4, 7x3, 7x2	8x8, 8x7, 8x6, 8x5, 8x4, 8x3, 8x2	
Light.....	4.00	5.00	
Medium.....	5.25	6.75	
Extra Heavy.....	6.00	8.00	
SIZE OF PIPE.....	10x10, 10x8, 10x6, 10x5, 10x4, 10x3, 10x2	12x12, 12x10, 12x8, 12x6, 12x5, 12x4, 12x3, 12x2	
Light.....	7.00	12.00	
Medium.....	9.50	14.50	
Extra Heavy.....	11.00	16.00	
Size of Pipe, 15x15 inches, light.....			22.00

Crosshead, Double Sanitary T, Double Y and Half Y Branches.

SIZE OF PIPE.	LIGHT.	MEDIUM.	EXTRA HEAVY.
2x2.....	1.00	1.15	1.25
3x3, 3x2.....	1.25	1.50	1.60
4x4, 4x3, 4x2.....	1.65	1.80	2.00
5x5, 5x4, 5x3, 5x2.....	2.25	2.75	3.00
6x6, 6x5, 6x4, 6x3, 6x2.....	3.00	3.75	4.00
7x7, 7x4.....	5.50		7.00
8x8, 8x6, 8x5, 8x4, 8x3, 8x2.....	6.00		9.00
10x10, 10x8, 10x6, 10x5, 10x4, 10x3, 10x2.....	9.00		14.00
12x12, 12x10, 12x8, 12x6, 12x5, 12x4, 12x3, 12x2.....	16.00		24.00

T, Sanitary T, Y and Half Y Branches, with Side Inlet.

For Inlet, add to List:

2 inch.....	.50
3 inch.....	.60
4 inch.....	.75
5 inch.....	1.00
6 inch.....	1.25

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Crosshead, Double Sanitary T, Double Y and Half Y Branches, with Side Inlet.

For Inlet, add to List:

2 inch.....	.50
3 inch.....	.60
4 inch.....	.75
5 inch.....	1.00
6 inch.....	1.25

Long T, Sanitary T and Y Branches.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.	SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
4x4, 18 inch long.....	2 00	.....	5x4, 36 inch long.....	4 75	6 75
4x4, 24 inch long.....	2 50	8 50	6x4, 24 inch long.....	4 25	6 00
4x4, 30 inch long.....	3 00	4 75	6x4, 30 inch long.....	5 25	7 25
4x4, 36 inch long.....	3 50	5 25	6x4, 36 inch long.....	6 25	9 00
5x4, 24 inch long.....	3 25	4 50	8x4, 33 inch long.....	.....	24 00
5x4, 30 inch long.....	4 00	5 50			

Y and Half Y Saddle Hubs.

SIZE OF PIPE.....	2x2	3x3, 3x2	4x4, 4x3, 4x2	5x5, 5x4, 5x3, 5x2
Light.....	.35	.55	.70	.90
Extra heavy.....	.45	.70	.90	1.15
SIZE OF PIPE.....	6x6, 6x5, 6x4, 6x3, 6x2		8x8, 8x6, 8x5, 8x4, 8x3, 8x2	
Light.....	1.25		2.00	
Extra heavy.....	1.55		3.00	
SIZE OF PIPE.....	10x10, 10x8, 10x6, 10x5, 10x4, 10x3, 10x2		12x12, 12x10, 12x8, 12x6, 12x5, 12x4, 12x3, 12x2	
Light.....	4.00		4.50	
Extra Heavy.....	5.50		6.50	

T Saddle Hubs.

SIZE OF PIPE.....	2x2	3x3, 3x2	4x4, 4x3, 4x2	5x5, 5x4, 5x3, 5x2
Light.....	.30	.50	.60	.75
Extra heavy.....	.40	.65	.80	1 00
SIZE OF PIPE.....	6x6, 6x5, 6x4, 6x3, 6x2		8x8, 8x6, 8x5, 8x4, 8x3, 8x2	
Light.....	1.10		1.50	
Extra heavy.....	1.40		2.25	
SIZE OF PIPE.....	10x10, 10x8, 10x6, 10x5, 10x4, 10x3, 10x2		12x12, 12x10, 12x8, 12x6, 12x5, 12x4, 12x3, 12x2	
Light.....	2.25		4.00	
Extra heavy.....	3.25		6.00	

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Vent Branch for Back Air Pipe.

SIZE OF PIPE..	2x2	3x3, 3x2	4x4, 4x3, 4x2
Light.....	.80	1.25	1.50
Extra heavy.....	1.25	1.75	2.00
SIZE OF PIPE.....	5x4, 5x3, 5x2	6x4, 6x3, 6x2	8x5, 8x4
Light.....	2.00	3.00	6.00
Extra heavy.....	2.75	4.00	8.50

Inverted Y Branch.

4x2 inch.

Light.....	1.50
Extra heavy..	2.00

H Branch, Three Hubs.

4 inch.....	1.75
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T Branch, Three Hubs.

4 inch.....	1.25
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Crosshead Branch, Four Hubs.

4 inch.....	1.75
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Offsets.

SIZE TO OFFSET.	LIGHT.	MEDIUM.	EXTRA HEAVY.	SIZE TO OFFSET.	LIGHT.	MEDIUM.	EXTRA HEAVY.
2x 2 inch.....	.40	.50	.60	4x12 inch.....	1.40	1.60	1.80
2x 4 inch.....	.50	.75	.90	4x14 inch.....	1.65	1.80	2.00
2x 6 inch.....	.60	.80	1.00	4x16 inch.....	1.80	2.00	2.25
2x 8 inch.....	.70	.90	1.10	4x18 inch.....	2.15	2.60	2.80
2x10 inch.....	.80	1.05	1.20	4x20 inch.....	2.25	2.80	3.00
2x12 inch.....	.85	1.15	1.25	4x24 inch.....		3.20	3.50
2x14 inch.....	1.00	1.25	1.45				
2x16 inch.....	1.15	1.40	1.60	5x 4 inch.....	1.40	1.60	1.80
2x18 inch.....	1.25	1.60	1.75	5x 6 inch.....	1.60	1.80	2.00
2x20 inch.....	1.75	2.25	2.50	5x 8 inch.....	1.80	2.00	2.25
				5x10 inch.....	1.90	2.20	2.40
3x 4 inch.....	.75	1.00	1.10	5x12 inch.....	2.00	2.30	2.50
3x 6 inch.....	.80	1.10	1.20	5x14 inch.....	2.20	2.50	2.75
3x 8 inch.....	.90	1.25	1.35	5x16 inch.....	2.40	2.75	3.00
3x10 inch.....	.95	1.30	1.40	5x18 inch.....	2.90	3.25	3.50
3x12 inch.....	1.00	1.35	1.45	5x20 inch.....	3.00	3.60	3.75
3x14 inch.....	1.25	1.50	1.70				
3x16 inch.....	1.40	1.75	1.90	6x 4 inch.....	2.00	2.50	3.00
3x18 inch.....	1.50	1.85	2.00	6x 6 inch.....	2.25	2.75	3.25
3x20 inch.....	2.00	2.50	2.75	6x 8 inch.....	2.40	3.00	3.50
				6x10 inch.....	2.60	3.25	3.75
4x 2 inch.....	.80	1.10	1.20	6x12 inch.....	2.75	3.50	4.00
4x 4 inch.....	.85	1.15	1.25	6x14 inch.....	3.00	4.00	4.50
4x 6 inch.....	1.00	1.25	1.40	6x16 inch.....	3.75	4.50	5.25
4x 8 inch.....	1.15	1.35	1.50				
4x10 inch.....	1.25	1.50	1.60	8x 4 inch.....	6.00		9.00

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Offset with Inlets.

Add to Offset List:

For Inlet 2 inch .....	.50
For Inlet 3 inch .....	.60
For Inlet 4 inch .....	.75

Sanitary Offsets.

Light, 4x14 inch	2.00
Light, 4x16 inch	2.25

Double Hubs, Single Hubs, Sleeves and Reducers.

SIZE OF PIPE	2	3	4	5	6	7	8	10	12	15
Light .....	.80	.45	.65	.75	.80	1.40	1.50	2.50	5.00	10.00
Medium .....	.85	.50	.70	.80	1.00	2.25	3.00	4.00	7.00	.....
Extra Heavy .....	.40	.55	.75	.90	1.15	2.50	3.50	4.50	8.00	.....

Reducers are made from 3x2 up to 12x2 inches.

Increasesers.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
3 inch.....	.70	1.00
4 inch.....	.90	1.25
5 inch.....	1.15	1.75
6 inch.....	1.25	2.25
7 inch.....	1.60	2.75
8 inch.....	2.00	5.00
10 inch.....	4.00	6.50
12 inch.....	6.00	8.50

Increasesers made from 2x3 up to 2x12 inches.

Extension Pieces.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.	SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2x 4 inch.....	.25	.35	4x10 inch .....	.85	1.10
2x 6 inch.....	.35	.45	4x12 inch	1.00	1.25
2x 8 inch.....	.45	.55	4x16 inch	1.40	.....
2x10 inch.....	.55	.65	4x18 inch	1.50	.....
2x12 inch.....	.65	.75	4x20 inch	2.00	.....
3x 4 inch.....	.35	.45	5x 6 inch .....	.60	.75
3x 6 inch.....	.45	.55	5x 8 inch .....	.80	1.00
3x 8 inch.....	.55	.65	5x10 inch	1.00	1.25
3x10 inch.....	.65	.75	5x12 inch	1.25	1.60
3x12 inch.....	.75	1.00	6x 6 inch .....	.75	1.00
4x 4 inch.....	.40	.50	6x 8 inch	1.00	1.30
4x 6 inch.....	.55	.65	6x10 inch	1.25	1.60
4x 8 inch.....	.70	.90	6x12 inch	1.50	1.85

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Thimbles.

SIZE OF PIPE.....	2	3	4	5	6
Light.....	.15	.25	.30	.35	.45
Extra heavy.....	.25	.40	.50	.60	.75

Thimbles, with Cover.

SIZE OF PIPE.....	2	3	4	5	6	8	10
Light.....	.40	.50	.60	.70	.90	2.25	5.00
Extra heavy.....	.50	.80	1.00	1.20	1.50	4.00	

Pipe Plugs.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2 inch.....	.15	.25
3 inch.....	.25	.35
4 inch.....	.30	.40
5 inch.....	.35	.50
6 inch.....	.50	.65
7 inch.....	.90	1.25
8 inch.....	1.20	1.50
10 inch.....	2.00	3.00
12 inch.....	3.00	4.00

Ventilating Caps.

SIZE OF PIPE.....	2	3	4	5	6
Light.....	.40	.60	.80	1.10	1.50
Extra heavy.....					

Pipe Rests.

SIZE OF PIPE.....	2	3	4	5	6	7	8	10	12
Light.....	.30	.40	.50	.60	.70	1.00	1.10	1.75	2.50
Extra heavy.....	.40	.55	.65	.80	1.00	1.50	1.75	2.50	3.50

Pipe Ears.

SIZE OF PIPE.....	2	3	4	5	6	7	8
Light.....	.45	.50	.55	.60	.65	.90	1.15

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Pipe Bands.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2 inch.....	.45	.90
3 inch.....	.55	1.00
4 inch.....	.70	1.50
5 inch.....	1.00	2.00
6 inch.....	1.40	2.75
8 inch.....	2.25	4.00

Pipe Bands, with Outlets.

From 2x2 to 8x2 inches.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2 inch.....	.75	1.50
3 inch.....	.90	1.75
4 inch.....	1.10	2.00
5 inch.....	1.45	2.75
6 inch.....	1.90	3.50
8 inch.....	3.00	5.00

Bath-Tub Connection.

2 inch.....	1.00
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S, Three-quarter S, and Half S Traps.

SIZE OF PIPE.	LIGHT.	EXTRA HEAVY.
2 inch.....	.80	1.25
3 inch.....	1.25	2.00
4 inch.....	1.75	2.75

4 inch Trap Flange or Bell.

Long S Trap, No Hand Hole.

4 in. x 15 in. long.....	2.25	4 in. x 18 in. long.....	2.40
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Half S Trap, Flange or Bell.

4 in. x 24 in. long.....	2.75
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CAST IRON SOIL PIPE AND FITTINGS—Continued.

S, Three-quarter S, and Half S Traps, with Hand Hole.

SIZE OF PIPE.....	2	3	4	5	6	8
Light.....	.80	1.25	1.75	3.00	4.00	9.00
Medium.....	1.00	1.75	2.40	3.50	4.85	10.75
Extra heavy.....	1.25	2.00	2.75	4.00	5.50	12.00

4 inch Top Flange or Bell.

S, Three-quarter S, and Half S Traps, with Vent.

SIZE OF PIPE.....	2	3	4	5	6	8
Light.....	1.30	1.75	2.25	3.50	4.50	9.50
Medium.....	1.50	2.25	2.90	4.00	5.25	11.25
Extra heavy.....	1.75	2.50	3.25	4.50	6.00	12.50

4 inch Trap Flange or Bell.

S, Three-quarter S and Half S Traps, Top Vent, with Brass Tap Screw on side.

SIZE OF PIPE.....	2	3	4	5	6
Light.....	3.80	4.25	4.75	6.00	7.00
Medium.....	4.00	4.75	5.40	6.50	7.75
Extra Heavy.....	4.25	5.00	5.75	7.00	8.50

Running Trap, with Hand Hole.

SIZE OF PIPE.....	2	3	4	5	6	8	10	12
Light.....	.80	1.25	1.75	3.00	4.00	9.00	.....	.....
Medium.....	1.00	1.75	2.40	3.50	4.75	.....	.....	.....
Extra Heavy.....	1.25	2.00	2.75	4.00	5.50	12.00	20.00	30.00

Running Trap, with One Vent.

SIZE OF PIPE.....	2	3	4	5	6	8	10	12
Light.....	1.30	1.75	2.50	3.75	4.75	9.75	.....	.....
Medium.....	1.50	2.25	3.15	4.25	5.50	11.50	.....	.....
Extra Heavy.....	1.75	2.50	3.50	4.75	6.25	12.75	20.00	30.00

4 inch and larger Vent and Hand Hole, same List.

CAST IRON SOIL PIPE AND FITTINGS—Continued.

Running Trap, with Two Vents.

SIZE OF PIPE	4	5	6	8	10	12
Light	3.25	4.50	5.50	11.00		
Medium	8.90	5.00	6.25	12.75		
Extra heavy	4.25	5.50	7.00	14.00	22.00	32.00

Running Trap, with Inlet on Dip.

4x4 inch.	Light, 3.50.	Extra heavy, 4.75
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Deep Seal Running, S, Three-quarter S and Half S Traps.

SIZE OF PIPE.....	3	4	5	6
Medium.....	2.50	3.00	4.50	6.00
Extra heavy.....	4.00	4.50	6.00	8.00

CAST IRON SINKS.

SQUARE SINKS.	PLAIN.	GALV'D.	SQUARE SINKS.	PLAIN.	GALV'D.
16x12, 4½ inch deep....	1.10	2.30	36x18, 6 inch deep	3.00	6.50
16x16, 6 inch deep.....	1.60	3.25	86x21, 6 inch deep.....	3.70	7.75
18x12, 6 inch deep.....	1.25	2.60	42x22, 6 inch deep.....	4.25	9.00
20x12, 6 inch deep.....	1.50	3.10	48x22, 6 inch deep.....	5.75	12.25
20x14, 6 inch deep.....	1.50	3.20	62x22, 8 inch deep.....	10.75	22.00
20x16, 6 inch deep.....	1.60	3.30			
20x20, 6 inch deep.....	1.95	4.20	CORNER SINKS.		
22x14, 6 inch deep.....	1.60	3.30			
23x15, 6 inch deep.....	1.70	3.40	17x25 inch.....	1.25	2.75
24x14, 6 inch deep.....	1.70	3.75	20x28 inch.....	1.75	3.50
24x16, 6 inch deep.....	1.80	4.00	22x31 inch.....	2.10	4.20
24x18, 6 inch deep.....	2.10	4.90			
24x20, 6 inch deep.....	2.40	5.00	SLOP SINKS.		
25x15, 6 inch deep.....	1.75	3.60	WITH ROUNDED CORNERS.		
27x15, 6 inch deep.....	2.00	4.25			
28x17, 6 inch deep.....	2.20	4.50	16x16, 10 inch deep.....	2.70	5.25
28x20, 6 inch deep.....	2.70	5.50	20x14, 12 inch deep.....	3.50	6.50
30x16, 6 inch deep.....	2.25	4.75	20x16, 12 inch deep.....	4.00	8.25
30x18, 6 inch deep.....	2.50	5.10	24x20, 12 inch deep.....	5.00	9.50
30x20, 6 inch deep.....	3.00	6.25	30x20, 12 inch deep.....	8.00	15.00
32x18, 6 inch deep.....	3.00	6.25	36x21, 12 inch deep.....	10.00	19.00
32x21, 6 inch deep.....	3.40	7.20	22x20, 12 inch deep.....	5.00	10.00

INSIDE IRON STRAPPED BLOCKS. IRON SHEAVES.

DIMENSIONS.			IRON BUSHED.			SELF ADJUSTING FIVE ROLLER BUSHED.			Price Common Iron Sheaves.
Size Sheaves.	For Dia. Rope.	Size Shell.	Single.	Double.	Triple.	Single.	Double.	Triple.	
1 $\frac{3}{4}$ x 1 $\frac{1}{2}$ x $\frac{3}{8}$	$\frac{3}{8}$	3 inch	.70	1.80	1.75	1.10	2.00	2.90	.09
2 x 1 $\frac{1}{2}$ x $\frac{3}{8}$	$\frac{3}{8}$	3 $\frac{1}{2}$ inch.	.75	1.45	2.00	1.15	2.20	3.15	.10
2 $\frac{1}{4}$ x $\frac{5}{8}$ x $\frac{3}{8}$	$\frac{1}{2}$	4 inch.	.85	1.60	2.15	1.20	2.25	3.25	.12
3 x $\frac{3}{4}$ x $\frac{3}{8}$	$\frac{5}{8}$	5 inch.	.90	1.75	2.25	1.25	2.35	3.50	.20
3 $\frac{1}{2}$ x 1 x $\frac{1}{2}$	$\frac{3}{4}$	6 inch.	1.10	2.00	2.90	1.50	2.85	4.40	.25
4 $\frac{1}{4}$ x 1 x $\frac{1}{2}$	$\frac{7}{8}$	7 inch.	1.30	2.40	3.50	1.70	3.35	5.00	.30
4 $\frac{3}{4}$ x 1 $\frac{1}{8}$ x $\frac{5}{8}$	1	8 inch.	1.65	2.85	4.25	2.25	4.15	6.00	.35
5 $\frac{1}{2}$ x 1 $\frac{1}{8}$ x $\frac{5}{8}$	1	9 inch.	1.85	3.40	4.75	2.50	4.70	7.25	.45
6 $\frac{1}{4}$ x 1 $\frac{1}{4}$ x $\frac{3}{4}$	1 $\frac{1}{8}$	10 inch.	2.75	4.50	6.25	3.50	6.00	8.50	.55
7 $\frac{1}{4}$ x 1 $\frac{1}{4}$ x $\frac{3}{4}$	1 $\frac{1}{8}$	11 inch.	Same	list as 12	inch.	Same	list as 12	inch.	.70
8 x 1 $\frac{3}{8}$ x $\frac{3}{4}$	1 $\frac{1}{4}$	12 inch.	4.45	7.50	10.65	5.30	9.20	13.20	.90
9 x 1 $\frac{1}{2}$ x $\frac{3}{4}$	1 $\frac{1}{4}$	13 inch.	Same	list as 14	inch.	Same	list as 14	inch.	1.20
9 $\frac{1}{2}$ x 1 $\frac{5}{8}$ x $\frac{3}{4}$	1 $\frac{3}{8}$	14 inch.	7.00	10.50	15.00	8.15	12.80	18.45	1.40
10 x 1 $\frac{5}{8}$ x $\frac{7}{8}$	1 $\frac{1}{2}$	15 inch.	8.00	13.50	18.00	9.25	15.50	21.75	1.50
11 x 1 $\frac{5}{8}$ x $\frac{7}{8}$	1 $\frac{5}{8}$	16 inch.	10.00	15.00	22.00	11.50	18.00	26.00	1.70

HEAVY TACKLE THICK MORTISE BLOCKS.

DIMENSIONS.			IRON BUSHED.			IMPROVED SELF ADJUSTING FIVE ROLLER, STEEL ROLLER BUSHED.			Improved Self Adjusting Five Roller Sheaves.
Size Sheaves.	For Dia. Rope.	Size Shell.	Single.	Double.	Triple.	Single.	Double.	Triple.	
4 $\frac{1}{4}$ x 1 $\frac{1}{8}$ x $\frac{1}{2}$	1	7 inch.	2.25	4.00	5.50	3.00	5.50	7.75	.75
4 $\frac{3}{4}$ x 1 $\frac{3}{8}$ x $\frac{5}{8}$	1 $\frac{1}{8}$	8 inch.	2.75	4.50	6.30	3.50	6.00	8.55	1.15
5 $\frac{1}{8}$ x 1 $\frac{3}{8}$ x $\frac{5}{8}$	1 $\frac{1}{8}$	9 inch.	3.15	5.25	7.25	4.00	6.95	9.80	1.25
6 $\frac{1}{4}$ x 1 $\frac{1}{2}$ x $\frac{3}{4}$	1 $\frac{1}{4}$	10 inch.	4.00	6.50	8.50	5.25	9.00	12.25	1.60
7 x 1 $\frac{1}{2}$ x $\frac{3}{4}$	1 $\frac{1}{4}$	11 inch.	Same	list as 12	inch.	Same	list as 12	inch.	1.80
8 x 1 $\frac{3}{8}$ x $\frac{3}{4}$	1 $\frac{1}{2}$	12 inch.	5.25	8.50	12.50	6.50	11.00	16.25	2.10
9 x 1 $\frac{3}{4}$ x $\frac{7}{8}$	1 $\frac{1}{2}$	13 inch.	Same	list as 14	inch.	Same	list as 14	inch.	2.55
9 $\frac{1}{2}$ x 1 $\frac{5}{8}$ x $\frac{7}{8}$	1 $\frac{3}{4}$	14 inch.	8.00	13.00	17.00	9.75	16.50	22.25	2.85
10 x 1 $\frac{7}{8}$ x 1	1 $\frac{3}{4}$	15 inch.	9.00	15.00	20.00	11.00	19.00	26.00	3.15
11 x 2 $\frac{1}{8}$ x 1	2	16 inch.	11.50	18.00	28.00	14.00	23.00	35.50	3.50

EXTRA HEAVY IRON STRAPPED BLOCKS.

DIMENSIONS.			IRON BUSHED.			IMPROVED ROLLER BUSHED.		
Size Sheave.	For Dia. Rope.	Size Shell.	Single.	Double.	Triple.	Single.	Double.	Triple.
12x2 $\frac{3}{8}$ x1	2 $\frac{1}{4}$	18 inch.	15.00	29.00	42.00	18.00	35.00	52.00
14x2 $\frac{7}{8}$ x1 $\frac{1}{2}$	2 $\frac{1}{2}$	20 inch.	21.00	37.00	54.00	25.00	45.00	65.00
15x3 $\frac{3}{8}$ x1 $\frac{1}{4}$	3	22 inch.	28.00	48.00	70.00			
16x3 $\frac{7}{8}$ x1 $\frac{1}{2}$	3 $\frac{1}{2}$	24 inch.	32.00	56.00	84.00			

STEEL TACKLE BLOCKS.

WITH LOOSE HOOKS.

Edges of Plates Rounded to Protect the Rope. Sizes 9 Inches and larger have the same score as Wide Mortise Wooden Blocks and will take the same size Rope.

DIMENSIONS.		IRON BUSHED.			SELF-LUBRICATING. FOOD'S PATENT.			SELF-LUBRICATING. METALINE OR BRONZE BUSHED.		
Length of Shell. Inches.	For Diameter Rope.	Single. Each.	Double. Each.	Triple. Each.	Single. Each.	Double. Each.	Triple. Each.	Single. Each.	Double. Each.	Triple. Each.
4	$\frac{1}{8}$ inch.....	.80	1.75	2.50	1.00	2.00	2.85	1.65	3.25	4.75
5	$\frac{5}{8}$ inch.....	1.00	1.90	2.75	1.12	2.15	3.10	1.80	3.50	5.15
6	$\frac{3}{4}$ inch.....	1.25	2.25	3.25	1.40	2.55	3.70	2.10	4.00	5.80
7	$\frac{7}{8}$ inch.....	1.50	2.70	4.00	1.70	3.05	4.50	2.45	4.60	6.85
8	1 inch.....	1.85	3.20	4.75	2.10	3.60	5.35	2.90	5.80	7.90
9	$1\frac{1}{8}$ inch.....	2.40	4.00	5.50	2.70	4.50	6.20	3.55	6.30	9.00
10	$1\frac{1}{4}$ inch.....	3.10	5.10	7.00	3.50	5.75	7.90	4.40	7.70	11.00
12	$1\frac{1}{2}$ inch.....	5.00	8.25	11.75	5.65	9.30	13.25	6.45	11.15	16.00
14	$1\frac{3}{4}$ inch.....	7.50	11.75	16.50	8.50	13.25	18.60	9.10	15.00	21.80

SNATCH BLOCKS.

SIZE OF SHEAVE.			WOOD.		STEEL AND WROUGHT IRON.
			Common Iron Bushed. Each.	Patent Roller Bushed. Each.	Common Iron Bushed. Each.
3	x $1\frac{1}{8}$ x $\frac{1}{8}$ inch.....	$\frac{7}{8}$	4.00	4.65	5.00
3 $\frac{1}{2}$	x $1\frac{1}{4}$ x $\frac{1}{8}$ inch.....	$\frac{7}{8}$	4.75	5.50	5.50
4 $\frac{1}{2}$	x $1\frac{3}{8}$ x $\frac{5}{8}$ inch.....	1	5.75	6.60	7.00
5	x $1\frac{3}{8}$ x $\frac{5}{8}$ inch.....	$1\frac{1}{8}$	6.75	7.75	8.00
5 $\frac{3}{4}$	x $1\frac{7}{8}$ x $\frac{3}{4}$ inch.....	$1\frac{1}{4}$	8.50	10.00	9.00
6 $\frac{3}{4}$	x $2\frac{1}{8}$ x $\frac{3}{4}$ inch.....	$1\frac{1}{2}$	10.00	11.50	11.50
8	x $2\frac{1}{4}$ x $\frac{7}{8}$ inch.....	$1\frac{3}{4}$	13.00	15.00	15.00
9	x $2\frac{5}{8}$ x 1 inch.....	2	17.00	20.00	20.00
10	x 3 x 1 inch.....	$2\frac{1}{4}$	25.00	28.50	25.00
11	x $3\frac{1}{2}$ x $1\frac{1}{4}$ inch.....	$2\frac{1}{2}$	38.00	43.00	38.00
11 $\frac{3}{4}$	x $4\frac{1}{4}$ x $1\frac{1}{2}$ inch.....	3	55.00	63.00	52.00
12 $\frac{1}{2}$	x $4\frac{1}{2}$ x $1\frac{1}{2}$ inch.....	$3\frac{1}{2}$	70.00	78.00	72.00

MACHINISTS' HAMMERS.

Solid Cast Steel Ball, Straight and Cross Pier.

Nos.....	0000	000	00	0	1	2	3
Weight.....	6 oz.	8 oz.	12 oz.	1 lb.	1 lb. 4 oz.	1 lb. 8 oz.	1 lb. 12 oz.
Per dozen.....	12.00	12.00	12.00	12.50	13.50	14.50	15.50
Nos.....	4	5	6	7	8	9	
Weight.....	2 lb.	2 lb. 4 oz.	2 lb. 8 oz.	2 lb. 12 oz.	3 lb.	3 lb. 8 oz.	
Per dozen.....	16.50	17.50	19.00	20.50	22.00	24.00	

RIVETING HAMMERS.

Solid Cast Steel, Plain Eye.

Nos.....	0	1	2	3	4	5	6	7
Weight.....	4 oz.	7 oz.	9 oz.	12 oz.	15 oz.	1 lb. 2 oz.	1 lb. 6 oz.	1 lb. 10 oz.
Per dozen.....	5.50	5.75	6.00	6.25	6.50	7.00	7.50	8.00

ENGINEERS' HAMMERS.

Solid Cast Steel.

Nos.....	0	1	2	3	4	5
Weight.....	1 lb. 2 oz.	1 lb. 10 oz.	2 lbs.	2 lbs. 8 oz.	3 lbs.	3 lbs. 8 oz.
List, per doz.....	12.00	18.00	14.00	15.00	16.00	17.00

Weights do not include handles.

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We number among our customers the leading railroads of the country. Twenty years of faithful service in supplying them with reliable Torpedoes and Fusees has been appreciated.

WE LEAD, OTHERS FOLLOW.

**The Western Railway Signal Company,
FOSTORIA, O.**



JOHN A. ROEBLING'S SONS CO.

*Wire Rope and Wire
OF ALL KINDS.*

*Salvanized
...Strand.*



Works at.....

Trenton, N. J.



*Showing Interior of
No. 1 Cells*

Gordon Primary Cell.

For Railway Signals, Crossing Alarm Bells, and all classes of work where a constant, steady, reliable current is required, the **GORDON CELL** is the only cell upon the market which the manufacturers dare openly to guarantee to live up to the claims made for it. Its superiority consists in its constant E. M. F., high capacity, low internal resistance, economy in maintenance (requiring no attention except when recharged), length of life, invariability in changing temperature, and freedom from noxious gases and fumes.

Send for Catalogue, Price List, Testimonials, etc.

Manufactured by

Gordon Battery Company,

Factory, CRANFORD, N. J.

594 Broadway, NEW YORK.

EMERY WHEELS.

DIAMETER.	THICKNESS OF WHEELS IN INCHES.												REVOLUTIONS PER MINUTE.				
	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	MIN.	MAX.
1 inch.....	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	13,000	18,000
1 1/2 inch.....	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	1.05	1.10	10,500	14,000
2 inch.....	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	1.05	1.10	1.15	1.20	7,900	11,000
2 1/2 inch.....	.65	.75	.85	.95	1.05	1.15	1.25	1.35	1.45	1.55	1.65	1.75	1.85	1.95	2.05	6,390	8,800
3 inch.....	.80	.95	1.10	1.25	1.40	1.55	1.70	1.85	2.00	2.15	2.30	2.45	2.60	2.75	2.90	5,275	7,400
3 1/2 inch.....	.95	1.15	1.35	1.55	1.75	1.95	2.15	2.35	2.55	2.75	2.95	3.15	3.35	3.55	3.75	4,500	6,300
4 inch.....	1.10	1.35	1.60	1.85	2.10	2.35	2.60	2.85	3.10	3.35	3.60	3.85	4.10	4.35	4.60	3,950	5,500
4 1/2 inch.....	1.25	1.55	1.85	2.15	2.45	2.75	3.05	3.35	3.65	3.95	4.25	4.55	4.85	5.15	5.45	3,500	4,900
5 inch.....	1.40	1.80	2.20	2.60	3.00	3.40	3.80	4.20	4.60	5.00	5.40	5.80	6.20	6.60	7.00	3,160	4,400
6 inch.....	1.75	2.40	3.05	3.70	4.35	5.00	5.65	6.30	6.95	7.60	8.25	8.90	9.55	10.20	10.85	2,640	3,700
7 inch.....	2.15	3.00	3.85	4.70	5.55	6.40	7.25	8.10	8.95	9.80	10.65	11.50	12.35	13.20	14.05	2,280	3,160
8 inch.....	2.60	3.60	4.60	5.60	6.60	7.60	8.60	9.60	10.60	11.60	12.60	13.60	14.60	15.60	16.60	1,980	2,770
9 inch.....	3.10	4.25	5.40	6.55	7.70	8.85	10.00	11.15	12.30	13.45	14.60	15.75	16.90	18.05	19.20	1,760	2,460
10 inch.....	3.65	5.00	6.35	7.70	9.05	10.40	11.75	13.10	14.45	15.80	17.15	18.50	19.85	21.20	22.55	1,580	2,210
12 inch.....	4.60	6.35	8.10	9.85	11.60	13.35	15.10	16.85	18.60	20.35	22.10	23.85	25.60	27.35	29.10	1,320	1,850
14 inch.....	6.25	8.45	10.65	12.85	15.05	17.25	19.45	21.65	23.85	26.05	28.25	30.45	32.65	34.85	37.05	1,180	1,580
16 inch.....	.....	10.85	13.70	16.55	19.40	22.25	25.10	27.95	30.80	33.65	36.50	39.35	42.20	45.05	47.90	990	1,390
18 inch.....	.....	13.25	17.00	20.75	24.50	28.25	32.00	35.75	39.50	43.25	47.00	50.75	54.50	58.25	62.00	880	1,290
20 inch.....	.....	.....	20.25	24.75	29.25	33.75	38.25	42.75	47.25	51.75	56.25	60.75	65.25	69.75	74.25	780	1,100
22 inch.....	.....	.....	25.00	31.00	37.00	43.00	49.00	55.00	61.00	67.00	73.00	79.00	85.00	91.00	97.00	720	1,000
24 inch.....	.....	.....	29.00	36.00	43.00	50.00	57.00	64.00	71.00	78.00	85.00	92.00	99.00	106.00	113.00	660	920
26 inch.....	.....	.....	.....	43.00	51.00	59.00	67.00	75.00	83.00	91.00	99.00	107.00	115.00	123.00	131.00	600	850
30 inch.....	.....	.....	.....	.....	61.00	72.00	83.00	94.00	105.00	116.00	127.00	138.00	149.00	160.00	171.00	500	735
36 inch.....	.....	.....	.....	.....	95.00	110.50	128.00	141.50	157.00	172.50	188.00	203.50	219.00	234.50	250.00	400	500
42 inch.....	.....	.....	.....	.....	.....	.....	160.00	178.00	196.00	214.00	232.00	250.00	268.00	286.00	304.00	350	360
48 inch.....	.....	.....	.....	.....	.....	.....	185.00	207.00	229.00	251.00	273.00	295.00	317.00	339.00	361.00	300	300

Wheels thinner than 1/2 inch, list at 1/2 prices.

PAPER AND CLOTH.

FLINT PAPER—Per Ream—In Sheets 9x11 Inches.

Nos. 000 to 1½ 5.00	No. 2 5.50	No. 2½ 6.00	No. 3 6.50	No. 3½ 7.00	No. 4 8.00
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EXTRA FLINT PAPER—In Rolls—Per Roll 50 Yards Long.

WIDTH.	Nos. 00 to 1½	No. 2	No. 2½	No. 3	No. 3½	No. 4
24 inches.....	5.50	6.00	6.50	7.00	8.00	9.00
30 inches.....	8.00	9.00	10.00	11.00	13.00	15.00
36 inches.....	10.00	11.00	12.00	13.00	15.00	
40 inches.....	12.00	13.00	14.00	15.00	17.00	
42 inches.....	13.00	14.00	15.00	16.00	18.00	
48 inches.....	15.00	17.00	18.00	20.00	23.00	

SAND CLOTH—Per Roll—14 Inches Wide and 50 Yards Long.

Nos. 00 to 2 10.00	Nos. 2½ to 3 12.50
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EMERY PAPER—Per Ream—In Sheets 9x11 Inches.

Nos. 00 to 1½ 7.00	No. 2 8.00	No. 2½ 10.00	No. 3 12.00	No. 3½ 14.00
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EMERY PAPER—Per Roll—24 Inches Wide and 50 Yards Long.

Nos. 00 to 1½ 7.50	No. 2 9.00	No. 2½ 11.00	No. 3 13.00	No. 3½ 15.00
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EMERY CLOTH—Per Ream—In Sheets 9x11 Inches.

Nos. FF to 1½ 20.00	No. 2 22.00	No. 2½ 26.00	No. 3 28.00	No. 3½ 30.00	Crocus Cloth. 20.00
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EMERY CLOTH—In Rolls—Per Roll 50 Yards Long.

WIDTH.	Nos. 00 to 1½	No. 2	No. 2½	No. 3	No. 3½
9 inches.....	7.00	8.00	9.50	11.00	13.00
18 inches.....	14.00	16.00	19.00	22.00	26.00
27 inches.....	21.00	24.00	28.50	33.00	39.00

HOLLOW CHISEL BITS, MACHINE AUGER BITS.

SIZE.	TWIST 4, 5, 6 INCHES LONG.		TWIST 8 INCHES LONG.		TWIST 10 INCHES LONG.		TWIST 12, 14 INCHES LONG.		TWIST 16, 18 INCHES LONG.		TWIST 20 INCHES LONG.	
	Dozen.	Each.	Dozen.	Each.	Dozen.	Each.	Dozen.	Each.	Dozen.	Each.	Dozen.	Each.
4-16.....	6.00	.55	6.60	.60	7.20	.65	7.80	.70	8.40	.80	9.00	.90
5-16.....	6.50	.60	7.15	.65	7.80	.75	8.50	.80	9.20	.85	9.90	.90
6-16.....	7.00	.65	7.70	.75	8.40	.80	9.10	.85	9.80	.90	10.50	.95
7-16.....	8.25	.75	9.10	.85	9.90	.90	10.70	1.00	11.60	1.05	12.50	1.10
8-16.....	9.50	.85	10.50	.95	11.40	1.05	12.40	1.10	13.30	1.20	14.30	1.25
9-16.....	10.50	.95	11.50	1.05	12.60	1.15	13.70	1.25	14.70	1.35	15.80	1.40
10-16.....	11.50	1.05	12.65	1.15	13.80	1.25	15.00	1.35	16.10	1.50	17.25	1.60
11-16.....	12.50	1.15	13.75	1.25	15.00	1.35	16.25	1.50	17.50	1.60	18.75	1.70
12-16.....	14.00	1.25	15.40	1.40	16.80	1.50	18.20	1.65	19.60	1.75	21.00	1.85
13-16.....	15.50	1.40	17.00	1.55	18.60	1.65	20.20	1.80	21.70	1.95	23.30	2.10
14-16.....	16.75	1.50	18.50	1.65	20.10	1.80	21.80	1.95	23.50	2.10	25.20	2.25
15-16.....	18.00	1.60	19.80	1.75	21.60	1.95	23.40	2.10	25.20	2.25	27.00	2.40
16-16.....	19.50	1.70	21.50	1.90	23.40	2.10	25.40	2.20	27.30	2.40	29.30	2.50
17-16.....	21.00	1.85	23.10	2.05	25.20	2.25	27.30	2.40	29.40	2.60	31.50	2.75
18-16.....	22.50	2.00	24.75	2.20	27.00	2.35	29.25	2.60	31.50	2.75	33.75	2.90
19-16.....	24.00	2.10	26.40	2.30	28.80	2.50	31.20	2.75	33.60	2.95	36.00	3.15
20-16.....	25.50	2.25	28.00	2.50	30.60	2.70	33.20	2.95	35.70	3.15	38.30	3.35
21-16.....	27.00	2.35	29.70	2.60	32.40	2.85	35.20	3.05	37.80	3.30	40.50	3.55
22-16.....	28.50	2.50	31.40	2.75	34.20	3.00	37.00	3.25	40.00	3.50	43.00	3.75
23-16.....	30.00	2.60	33.00	2.85	36.00	3.15	39.00	3.35	42.00	3.60	45.00	3.85
24-16.....	31.50	2.75	34.70	3.00	37.80	3.30	41.00	3.60	44.10	3.85	47.30	4.10
25-16.....	33.00	2.85	36.30	3.15	39.60	3.40	43.00	3.70	46.20	4.00	49.60	4.30
26-16.....	34.50	3.00	38.00	3.30	41.40	3.60	45.00	3.90	48.30	4.20	51.70	4.50
27-16.....	36.00	3.10	39.60	3.40	43.20	3.75	46.80	4.05	50.40	4.35	54.00	4.80
28-16.....	37.50	3.25	41.25	3.55	45.00	3.90	48.75	4.25	52.50	4.55	56.25	5.00
29-16.....	39.00	3.35	43.00	3.70	46.80	4.05	50.70	4.40	54.60	4.70	58.50	5.10
30-16.....	40.50	3.50	44.50	3.85	48.60	4.20	52.70	4.55	56.70	4.90	60.80	5.25
31-16.....	42.00	3.60	46.25	4.00	50.40	4.35	54.80	4.70	58.80	5.05	63.00	5.40
32-16.....	43.50	3.75	48.00	4.15	52.20	4.50	56.80	4.90	61.00	5.25	65.40	5.60
33-16.....	45.00	3.85	49.75	4.35	54.00	4.65	58.80	5.05	63.20	5.50	67.80	5.90
34-16.....	46.50	4.00	51.50	4.50	55.80	4.80	60.80	5.25	65.40	5.75	70.20	6.25
35-16.....	48.00	4.10	53.25	4.65	57.60	5.00	62.60	5.50	67.70	6.00	72.80	6.50
36-16.....	49.50	4.25	55.00	4.80	59.40	5.20	64.60	5.75	70.00	6.25	75.40	6.75

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Punches and Shears.
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High Speed Machine Auger Bits.
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Planing Machine Knives.

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HOLLOW CHISELS TO FIT ANY MORTISING MACHINE.

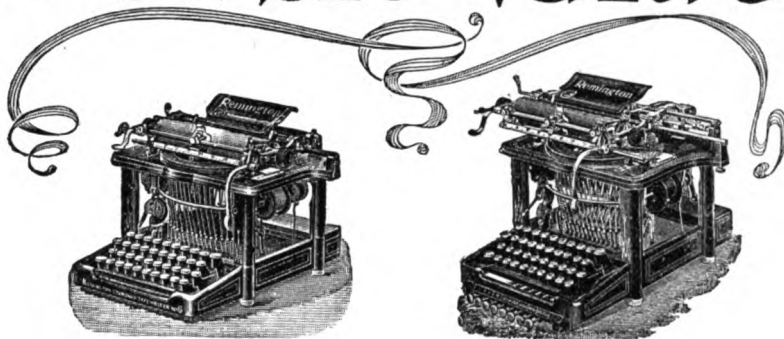
SHORT STYLE FOR SMALL MORTISERS, BLADES 4 INCHES LONG AND UNDER.			LONG STYLE FOR LARGE MORTISERS, BLADES 6½ INCHES LONG.		
¼ inch x ¼ inch	2.50		¾ inch square	4.50	
¼ inch x ⅜ inch	2.55		1 inch square	4.75	
¼ inch x ½ inch	2.60		1½ inch square	5.00	
⅜ inch x ⅜ inch	2.65		1½ inch square	5.25	
⅜ inch x ½ inch	2.75		1½ inch square	5.50	
⅜ inch x ¾ inch	2.80		1½ inch square	5.75	
½ inch x ½ inch	2.85		1½ inch square	6.00	
½ inch x ¾ inch	2.90		1½ inch square	6.25	
½ inch x 1 inch	3.00		1½ inch square	6.50	
¾ inch x ¾ inch	2.95		1½ inch square	6.75	
¾ inch x 1 inch	3.00		1½ inch square	7.00	
¾ inch x 1½ inch	3.05		1½ inch square	7.75	
1 inch x ¾ inch	3.10		1½ inch square	8.50	
1 inch x 1 inch	3.20		1½ inch square	9.25	
1 inch x 1½ inch	3.30		1½ inch square	10.00	
1½ inch x 1 inch	3.40		1½ inch square	10.75	
1½ inch x 1½ inch	3.50		1½ inch square	11.50	
1½ inch x 2 inch	3.60		1½ inch square	12.25	
2 inch x 1½ inch	3.50		2 inch square	13.00	
2 inch x 2 inch	3.85		2½ inch square	14.50	
2½ inch x 2 inch	4.05		2½ inch square	16.00	
3 inch x 2½ inch	4.25		3 inch square	17.50	
			3 inch square	19.00	

Add 10 per cent. for each additional one inch of length.

PRICE LIST OF COMMON MORTISING CHISELS.

J. A. FAY, EGAN CO., OR ROGERS CAR MORTISER.		ATLANTIC WORKS (BERRY & ORTON) CAR MORTISER.		FAY, SMITH, OR ANY SASH AND DOOR MORTISER.	
¼ inch	2.25	¼ inch	2.70	¼ inch	1.00
⅜ inch	2.25	⅜ inch	2.70	⅜ inch	1.00
½ inch	2.25	½ inch	2.70	½ inch	1.00
¾ inch	2.25	¾ inch	2.70	¾ inch	1.00
1 inch	2.25	1 inch	2.95	1 inch	1.00
1½ inch	2.50	1½ inch	3.70	1½ inch	1.25
2 inch	2.50	2 inch	3.70	2 inch	1.25
2½ inch	2.75	2½ inch	3.95	2½ inch	1.25
3 inch	2.75	3 inch	3.95	3 inch	1.50
3½ inch	3.00	3½ inch	3.95	3½ inch	1.50
4 inch	3.00	4 inch	4.20	4 inch	2.00
4½ inch	3.25	4½ inch	4.20	4½ inch	2.00
5 inch	3.25	5 inch	4.50	5 inch	2.25
5½ inch	3.50	5½ inch	4.50	5½ inch	2.25
6 inch	3.50	6 inch	4.70	6 inch	2.25

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Sewed well, keeps them from fraying out and they last five
times longer. We have been selling them sewed for twelve
years and our first customer has been buying from us ever
since. Our charge for sewing is less than a cent apiece over
the cost of the bunting. We make them any size. Write
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CINCINNATI, OHIO.

IRON OR STEEL WIRE CLOTH.

MANUFACTURERS' PRICE LIST OF ALL GRADES.

No Length less than 100 Feet shall be Understood to be a Roll.

The Mesh in Wire Cloth is the distance from the centre to the centre of the wire per lineal inch.

No. 1	Mesh, No. 3	Wire.....	88	cts.	per sq. ft.
No. 1	Mesh, No. 4	Wire.....	73	cts.	per sq. ft.
No. 1	Mesh, No. 5	Wire.....	60	cts.	per sq. ft.
No. 1	Mesh, No. 6	Wire.....	48	cts.	per sq. ft.
No. 1	Mesh, No. 7	Wire.....	38	cts.	per sq. ft.
No. 1	Mesh, No. 8	Wire.....	32	cts.	per sq. ft.
No. 1	Mesh, No. 9	Wire.....	27	cts.	per sq. ft.
No. 1	Mesh, No. 10	Wire.....	22	cts.	per sq. ft.
No. 1	Mesh, No. 11	Wire.....	17	cts.	per sq. ft.
No. 1	Mesh, No. 12	Wire.....	14	cts.	per sq. ft.
No. 1	Mesh, No. 13	Wire.....	12	cts.	per sq. ft.
No. 1	Mesh, No. 14	Wire.....	10	cts.	per sq. ft.
No. 1	Mesh, No. 15	Wire.....	8	cts.	per sq. ft.
No. 1	Mesh, No. 4	Wire.....	88	cts.	per sq. ft.
No. 1	Mesh, No. 5	Wire.....	73	cts.	per sq. ft.
No. 1	Mesh, No. 6	Wire.....	60	cts.	per sq. ft.
No. 1	Mesh, No. 7	Wire.....	48	cts.	per sq. ft.
No. 1	Mesh, No. 8	Wire.....	38	cts.	per sq. ft.
No. 1	Mesh, No. 9	Wire.....	32	cts.	per sq. ft.
No. 1	Mesh, No. 10	Wire.....	27	cts.	per sq. ft.
No. 1	Mesh, No. 11	Wire.....	22	cts.	per sq. ft.
No. 1	Mesh, No. 12	Wire.....	17	cts.	per sq. ft.
No. 1	Mesh, No. 13	Wire.....	14	cts.	per sq. ft.
No. 1	Mesh, No. 14	Wire.....	12	cts.	per sq. ft.
No. 1	Mesh, No. 15	Wire.....	10	cts.	per sq. ft.
No. 1	Mesh, No. 16	Wire.....	8	cts.	per sq. ft.
No. 1	Mesh, No. 5	Wire.....	88	cts.	per sq. ft.
No. 1	Mesh, No. 6	Wire.....	73	cts.	per sq. ft.
No. 1	Mesh, No. 7	Wire.....	60	cts.	per sq. ft.
No. 1	Mesh, No. 8	Wire.....	48	cts.	per sq. ft.
No. 1	Mesh, No. 9	Wire.....	38	cts.	per sq. ft.
No. 1	Mesh, No. 10	Wire.....	32	cts.	per sq. ft.
No. 1	Mesh, No. 11	Wire.....	27	cts.	per sq. ft.
No. 1	Mesh, No. 12	Wire.....	22	cts.	per sq. ft.
No. 1	Mesh, No. 13	Wire.....	17	cts.	per sq. ft.
No. 1	Mesh, No. 14	Wire.....	14	cts.	per sq. ft.
No. 1	Mesh, No. 15	Wire.....	12	cts.	per sq. ft.
No. 1	Mesh, No. 16	Wire.....	10	cts.	per sq. ft.
No. 1	Mesh, No. 17	Wire.....	8	cts.	per sq. ft.
No. 2	Mesh, No. 6	Wire.....	88	cts.	per sq. ft.
No. 2	Mesh, No. 7	Wire.....	73	cts.	per sq. ft.
No. 2	Mesh, No. 8	Wire.....	60	cts.	per sq. ft.
No. 2	Mesh, No. 9	Wire.....	48	cts.	per sq. ft.
No. 2	Mesh, No. 10	Wire.....	38	cts.	per sq. ft.
No. 2	Mesh, No. 11	Wire.....	32	cts.	per sq. ft.
No. 2	Mesh, No. 12	Wire.....	27	cts.	per sq. ft.
No. 2	Mesh, No. 13	Wire.....	22	cts.	per sq. ft.
No. 2	Mesh, No. 14	Wire.....	17	cts.	per sq. ft.
No. 2	Mesh, No. 15	Wire.....	14	cts.	per sq. ft.
No. 2	Mesh, No. 16	Wire.....	12	cts.	per sq. ft.
No. 2	Mesh, No. 17	Wire.....	10	cts.	per sq. ft.
No. 2	Mesh, No. 18	Wire.....	8	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 8	Wire.....	73	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 9	Wire.....	60	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 10	Wire.....	48	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 11	Wire.....	38	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 12	Wire.....	32	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 13	Wire.....	27	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 14	Wire.....	22	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 15	Wire.....	17	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 16	Wire.....	14	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 17	Wire.....	12	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 18	Wire.....	10	cts.	per sq. ft.
No. 2 1/2	Mesh, No. 19	Wire.....	8	cts.	per sq. ft.
No. 3	Mesh, No. 10	Wire.....	60	cts.	per sq. ft.
No. 3	Mesh, No. 11	Wire.....	48	cts.	per sq. ft.
No. 3	Mesh, No. 12	Wire.....	38	cts.	per sq. ft.
No. 3	Mesh, No. 13	Wire.....	32	cts.	per sq. ft.
No. 3	Mesh, No. 14	Wire.....	27	cts.	per sq. ft.
No. 3	Mesh, No. 15	Wire.....	22	cts.	per sq. ft.
No. 3	Mesh, No. 16	Wire.....	17	cts.	per sq. ft.
No. 3	Mesh, No. 17	Wire.....	14	cts.	per sq. ft.
No. 3	Mesh, No. 18	Wire.....	12	cts.	per sq. ft.
No. 3	Mesh, No. 19	Wire.....	10	cts.	per sq. ft.
No. 3	Mesh, No. 20	Wire.....	8	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 11	Wire.....	60	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 12	Wire.....	48	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 13	Wire.....	38	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 14	Wire.....	32	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 15	Wire.....	27	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 16	Wire.....	22	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 17	Wire.....	17	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 18	Wire.....	14	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 19	Wire.....	12	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 20	Wire.....	10	cts.	per sq. ft.
No. 3 1/2	Mesh, No. 21	Wire.....	8	cts.	per sq. ft.
No. 4	Mesh, No. 11	Wire.....	73	cts.	per sq. ft.
No. 4	Mesh, No. 12	Wire.....	60	cts.	per sq. ft.
No. 4	Mesh, No. 13	Wire.....	48	cts.	per sq. ft.
No. 4	Mesh, No. 14	Wire.....	38	cts.	per sq. ft.
No. 4	Mesh, No. 15	Wire.....	32	cts.	per sq. ft.
No. 4	Mesh, No. 16	Wire.....	27	cts.	per sq. ft.
No. 4	Mesh, No. 17	Wire.....	22	cts.	per sq. ft.
No. 4	Mesh, No. 18	Wire.....	17	cts.	per sq. ft.
No. 4	Mesh, No. 19	Wire.....	14	cts.	per sq. ft.
No. 4	Mesh, No. 20	Wire.....	12	cts.	per sq. ft.
No. 4	Mesh, No. 21	Wire.....	10	cts.	per sq. ft.
No. 4	Mesh, No. 22	Wire.....	8	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 12	Wire.....	73	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 13	Wire.....	57	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 14	Wire.....	45	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 15	Wire.....	35	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 16	Wire.....	29	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 17	Wire.....	24	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 18	Wire.....	19	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 19	Wire.....	15	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 20	Wire.....	13	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 21	Wire.....	11	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 22	Wire.....	9	cts.	per sq. ft.
No. 4 1/2	Mesh, No. 23	Wire.....	7	cts.	per sq. ft.
No. 5	Mesh, No. 13	Wire.....	60	cts.	per sq. ft.
No. 5	Mesh, No. 14	Wire.....	48	cts.	per sq. ft.
No. 5	Mesh, No. 15	Wire.....	38	cts.	per sq. ft.
No. 5	Mesh, No. 16	Wire.....	32	cts.	per sq. ft.
No. 5	Mesh, No. 17	Wire.....	27	cts.	per sq. ft.
No. 5	Mesh, No. 18	Wire.....	22	cts.	per sq. ft.
No. 5	Mesh, No. 19	Wire.....	17	cts.	per sq. ft.
No. 5	Mesh, No. 20	Wire.....	14	cts.	per sq. ft.
No. 5	Mesh, No. 21	Wire.....	12	cts.	per sq. ft.
No. 5	Mesh, No. 22	Wire.....	10	cts.	per sq. ft.
No. 5	Mesh, No. 23	Wire.....	8	cts.	per sq. ft.
No. 5	Mesh, No. 24	Wire.....	7	cts.	per sq. ft.
No. 6	Mesh, No. 14	Wire.....	60	cts.	per sq. ft.
No. 6	Mesh, No. 15	Wire.....	48	cts.	per sq. ft.
No. 6	Mesh, No. 16	Wire.....	38	cts.	per sq. ft.
No. 6	Mesh, No. 17	Wire.....	32	cts.	per sq. ft.
No. 6	Mesh, No. 18	Wire.....	27	cts.	per sq. ft.
No. 6	Mesh, No. 19	Wire.....	22	cts.	per sq. ft.

IRON OR STEEL WIRE CLOTH—Continued.

No. 24 Mesh, No. 29 Wire	38 cts. per sq. ft.
No. 24 Mesh, No. 30 Wire	30 cts. per sq. ft.
No. 24 Mesh, No. 31 Wire	26 cts. per sq. ft.
No. 24 Mesh, No. 32 Wire	22 cts. per sq. ft.
No. 24 Mesh, No. 33 Wire	19 cts. per sq. ft.
No. 24 Mesh, No. 34 Wire	17 cts. per sq. ft.
No. 24 Mesh, No. 35 Wire	15 cts. per sq. ft.
No. 24 Mesh, No. 36 Wire	13 cts. per sq. ft.
No. 26 Mesh, No. 26 Wire	77 cts. per sq. ft.
No. 26 Mesh, No. 27 Wire	65 cts. per sq. ft.
No. 26 Mesh, No. 28 Wire	55 cts. per sq. ft.
No. 26 Mesh, No. 29 Wire	46 cts. per sq. ft.
No. 26 Mesh, No. 30 Wire	38 cts. per sq. ft.
No. 26 Mesh, No. 31 Wire	30 cts. per sq. ft.
No. 26 Mesh, No. 32 Wire	26 cts. per sq. ft.
No. 26 Mesh, No. 33 Wire	23 cts. per sq. ft.
No. 26 Mesh, No. 34 Wire	19 cts. per sq. ft.
No. 26 Mesh, No. 35 Wire	17 cts. per sq. ft.
No. 26 Mesh, No. 36 Wire	15 cts. per sq. ft.
No. 28 Mesh, No. 27 Wire	77 cts. per sq. ft.
No. 28 Mesh, No. 28 Wire	65 cts. per sq. ft.
No. 28 Mesh, No. 29 Wire	55 cts. per sq. ft.
No. 28 Mesh, No. 30 Wire	46 cts. per sq. ft.
No. 28 Mesh, No. 31 Wire	35 cts. per sq. ft.
No. 28 Mesh, No. 32 Wire	30 cts. per sq. ft.
No. 28 Mesh, No. 33 Wire	26 cts. per sq. ft.
No. 28 Mesh, No. 34 Wire	23 cts. per sq. ft.
No. 28 Mesh, No. 35 Wire	19 cts. per sq. ft.
No. 28 Mesh, No. 36 Wire	17 cts. per sq. ft.
No. 30 Mesh, No. 28 Wire	66 cts. per sq. ft.
No. 30 Mesh, No. 29 Wire	56 cts. per sq. ft.
No. 30 Mesh, No. 30 Wire	47 cts. per sq. ft.
No. 30 Mesh, No. 31 Wire	37 cts. per sq. ft.
No. 30 Mesh, No. 32 Wire	31 cts. per sq. ft.
No. 30 Mesh, No. 33 Wire	27 cts. per sq. ft.
No. 30 Mesh, No. 34 Wire	23 cts. per sq. ft.
No. 30 Mesh, No. 35 Wire	20 cts. per sq. ft.
No. 30 Mesh, No. 36 Wire	19 cts. per sq. ft.
No. 35 Mesh, No. 29 Wire	80 cts. per sq. ft.
No. 35 Mesh, No. 30 Wire	67 cts. per sq. ft.
No. 35 Mesh, No. 31 Wire	57 cts. per sq. ft.
No. 35 Mesh, No. 32 Wire	47 cts. per sq. ft.
No. 35 Mesh, No. 33 Wire	40 cts. per sq. ft.
No. 35 Mesh, No. 34 Wire	36 cts. per sq. ft.
No. 35 Mesh, No. 35 Wire	30 cts. per sq. ft.
No. 35 Mesh, No. 36 Wire	27 cts. per sq. ft.
No. 40 Mesh, No. 31 Wire	68 cts. per sq. ft.
No. 40 Mesh, No. 32 Wire	57 cts. per sq. ft.
No. 40 Mesh, No. 33 Wire	48 cts. per sq. ft.
No. 40 Mesh, No. 34 Wire	44 cts. per sq. ft.
No. 40 Mesh, No. 35 Wire	40 cts. per sq. ft.
No. 40 Mesh, No. 36 Wire	36 cts. per sq. ft.
No. 40 Mesh, No. 37 Wire	32 cts. per sq. ft.
No. 45 Mesh, No. 33 Wire	70 cts. per sq. ft.
No. 45 Mesh, No. 34 Wire	58 cts. per sq. ft.
No. 45 Mesh, No. 35 Wire	50 cts. per sq. ft.
No. 45 Mesh, No. 36 Wire	46 cts. per sq. ft.
No. 45 Mesh, No. 37 Wire	42 cts. per sq. ft.
No. 50 Mesh, No. 34 Wire	80 cts. per sq. ft.
No. 50 Mesh, No. 35 Wire	65 cts. per sq. ft.
No. 50 Mesh, No. 36 Wire	60 cts. per sq. ft.
No. 50 Mesh, No. 37 Wire	56 cts. per sq. ft.
No. 55 Mesh, No. 35 Wire	80 cts. per sq. ft.
No. 55 Mesh, No. 36 Wire	65 cts. per sq. ft.
No. 55 Mesh, No. 37 Wire	60 cts. per sq. ft.
No. 60 Mesh, No. 36 Wire	85 cts. per sq. ft.
No. 60 Mesh, No. 37 Wire	70 cts. per sq. ft.
No. 60 Mesh, No. 38 Wire	65 cts. per sq. ft.
No. 64 Mesh, No. 37 Wire	85 cts. per sq. ft.
No. 64 Mesh, No. 38 Wire	70 cts. per sq. ft.

No. 64 Mesh, No. 39 Wire	65 cts. per sq. ft.
No. 70 Mesh, No. 38 Wire	90 cts. per sq. ft.
No. 70 Mesh, No. 39 Wire	80 cts. per sq. ft.
No. 74 Mesh, No. 39 Wire	100 cts. per sq. ft.
No. 74 Mesh, No. 40 Wire	90 cts. per sq. ft.
No. 80 Mesh, No. 40 Wire	120 cts. per sq. ft.
No. 80 Mesh, No. 41 Wire	110 cts. per sq. ft.
No. 90 Mesh, No. 42 Wire	145 cts. per sq. ft.

GALVANIZED WIRE CLOTH.

Price List Same as Iron or Steel Wire Cloth.

BRASS AND COPPER WIRE CLOTH.

Manufacturers' Price List of All Grades.

No length less than 100 feet shall be understood to be a roll. The Mesh in Wire Cloth is the distance from the centre to the centre of the wire per lineal inch.

No. 2 Mesh, No. 8 Wire	4.00 per sq. ft.
No. 2 Mesh, No. 9 Wire	3.50 per sq. ft.
No. 2 Mesh, No. 10 Wire	3.00 per sq. ft.
No. 2 Mesh, No. 11 Wire	2.50 per sq. ft.
No. 2 Mesh, No. 12 Wire	1.75 per sq. ft.
No. 2 Mesh, No. 13 Wire	1.20 per sq. ft.
No. 2 Mesh, No. 14 Wire	.85 per sq. ft.
No. 2 Mesh, No. 15 Wire	.60 per sq. ft.
No. 2 Mesh, No. 16 Wire	.50 per sq. ft.
No. 2 Mesh, No. 17 Wire	.45 per sq. ft.
No. 2 Mesh, No. 18 Wire	.40 per sq. ft.
No. 3 Mesh, No. 10 Wire	4.00 per sq. ft.
No. 3 Mesh, No. 11 Wire	3.50 per sq. ft.
No. 3 Mesh, No. 12 Wire	2.50 per sq. ft.
No. 3 Mesh, No. 13 Wire	1.75 per sq. ft.
No. 3 Mesh, No. 14 Wire	1.20 per sq. ft.
No. 3 Mesh, No. 15 Wire	.85 per sq. ft.
No. 3 Mesh, No. 16 Wire	.60 per sq. ft.
No. 3 Mesh, No. 17 Wire	.50 per sq. ft.
No. 3 Mesh, No. 18 Wire	.45 per sq. ft.
No. 3 Mesh, No. 19 Wire	.40 per sq. ft.
No. 3 Mesh, No. 20 Wire	.35 per sq. ft.
No. 4 Mesh, No. 11 Wire	4.00 per sq. ft.
No. 4 Mesh, No. 12 Wire	3.00 per sq. ft.
No. 4 Mesh, No. 13 Wire	2.50 per sq. ft.
No. 4 Mesh, No. 14 Wire	1.75 per sq. ft.
No. 4 Mesh, No. 15 Wire	1.20 per sq. ft.
No. 4 Mesh, No. 16 Wire	.85 per sq. ft.
No. 4 Mesh, No. 17 Wire	.60 per sq. ft.
No. 4 Mesh, No. 18 Wire	.50 per sq. ft.
No. 4 Mesh, No. 19 Wire	.45 per sq. ft.
No. 4 Mesh, No. 20 Wire	.40 per sq. ft.
No. 4 Mesh, No. 21 Wire	.35 per sq. ft.
No. 5 Mesh, No. 13 Wire	3.00 per sq. ft.
No. 5 Mesh, No. 14 Wire	2.50 per sq. ft.
No. 5 Mesh, No. 15 Wire	1.75 per sq. ft.
No. 5 Mesh, No. 16 Wire	1.20 per sq. ft.
No. 5 Mesh, No. 17 Wire	.85 per sq. ft.
No. 5 Mesh, No. 18 Wire	.60 per sq. ft.
No. 5 Mesh, No. 19 Wire	.50 per sq. ft.
No. 5 Mesh, No. 20 Wire	.45 per sq. ft.
No. 5 Mesh, No. 21 Wire	.40 per sq. ft.
No. 5 Mesh, No. 22 Wire	.35 per sq. ft.
No. 6 Mesh, No. 14 Wire	3.00 per sq. ft.
No. 6 Mesh, No. 15 Wire	2.50 per sq. ft.
No. 6 Mesh, No. 16 Wire	1.75 per sq. ft.
No. 6 Mesh, No. 17 Wire	1.20 per sq. ft.
No. 6 Mesh, No. 18 Wire	.85 per sq. ft.
No. 6 Mesh, No. 19 Wire	.60 per sq. ft.
No. 6 Mesh, No. 20 Wire	.50 per sq. ft.

BRASS AND COPPER WIRE CLOTH—Continued.

No. 6 Mesh, No. 21 Wire	.45 per sq. ft.	No. 20 Mesh, No. 30 Wire	.40 per sq. ft.
No. 6 Mesh, No. 22 Wire	.40 per sq. ft.	No. 20 Mesh, No. 31 Wire	.35 per sq. ft.
No. 6 Mesh, No. 23 Wire	.35 per sq. ft.	No. 20 Mesh, No. 32 Wire	.30 per sq. ft.
No. 8 Mesh, No. 16 Wire	3.00 per sq. ft.	No. 20 Mesh, No. 33 Wire	.27 per sq. ft.
No. 8 Mesh, No. 17 Wire	2.50 per sq. ft.	No. 20 Mesh, No. 34 Wire	.25 per sq. ft.
No. 8 Mesh, No. 18 Wire	1.75 per sq. ft.	No. 22 Mesh, No. 25 Wire	1.75 per sq. ft.
No. 8 Mesh, No. 19 Wire	1.20 per sq. ft.	No. 22 Mesh, No. 26 Wire	1.20 per sq. ft.
No. 8 Mesh, No. 20 Wire	.85 per sq. ft.	No. 22 Mesh, No. 27 Wire	.85 per sq. ft.
No. 8 Mesh, No. 21 Wire	.60 per sq. ft.	No. 22 Mesh, No. 28 Wire	.60 per sq. ft.
No. 8 Mesh, No. 22 Wire	.50 per sq. ft.	No. 22 Mesh, No. 29 Wire	.50 per sq. ft.
No. 8 Mesh, No. 23 Wire	.45 per sq. ft.	No. 22 Mesh, No. 30 Wire	.45 per sq. ft.
No. 8 Mesh, No. 24 Wire	.40 per sq. ft.	No. 22 Mesh, No. 31 Wire	.40 per sq. ft.
No. 8 Mesh, No. 25 Wire	.35 per sq. ft.	No. 22 Mesh, No. 32 Wire	.35 per sq. ft.
No. 10 Mesh, No. 17 Wire	3.00 per sq. ft.	No. 22 Mesh, No. 33 Wire	.30 per sq. ft.
No. 10 Mesh, No. 18 Wire	2.50 per sq. ft.	No. 22 Mesh, No. 34 Wire	.27 per sq. ft.
No. 10 Mesh, No. 19 Wire	1.75 per sq. ft.	No. 22 Mesh, No. 35 Wire	.25 per sq. ft.
No. 10 Mesh, No. 20 Wire	1.20 per sq. ft.	No. 24 Mesh, No. 26 Wire	1.75 per sq. ft.
No. 10 Mesh, No. 21 Wire	.85 per sq. ft.	No. 24 Mesh, No. 27 Wire	1.20 per sq. ft.
No. 10 Mesh, No. 22 Wire	.60 per sq. ft.	No. 24 Mesh, No. 28 Wire	.85 per sq. ft.
No. 10 Mesh, No. 23 Wire	.50 per sq. ft.	No. 24 Mesh, No. 29 Wire	.60 per sq. ft.
No. 10 Mesh, No. 24 Wire	.45 per sq. ft.	No. 24 Mesh, No. 30 Wire	.50 per sq. ft.
No. 10 Mesh, No. 25 Wire	.40 per sq. ft.	No. 24 Mesh, No. 31 Wire	.45 per sq. ft.
No. 10 Mesh, No. 26 Wire	.35 per sq. ft.	No. 24 Mesh, No. 32 Wire	.40 per sq. ft.
No. 12 Mesh, No. 19 Wire	2.50 per sq. ft.	No. 24 Mesh, No. 33 Wire	.35 per sq. ft.
No. 12 Mesh, No. 20 Wire	1.75 per sq. ft.	No. 24 Mesh, No. 34 Wire	.30 per sq. ft.
No. 12 Mesh, No. 21 Wire	1.20 per sq. ft.	No. 24 Mesh, No. 35 Wire	.27 per sq. ft.
No. 12 Mesh, No. 22 Wire	.85 per sq. ft.	No. 24 Mesh, No. 36 Wire	.25 per sq. ft.
No. 12 Mesh, No. 23 Wire	.60 per sq. ft.	No. 26 Mesh, No. 27 Wire	1.75 per sq. ft.
No. 12 Mesh, No. 24 Wire	.50 per sq. ft.	No. 26 Mesh, No. 28 Wire	1.20 per sq. ft.
No. 12 Mesh, No. 25 Wire	.45 per sq. ft.	No. 26 Mesh, No. 29 Wire	.85 per sq. ft.
No. 12 Mesh, No. 26 Wire	.40 per sq. ft.	No. 26 Mesh, No. 30 Wire	.60 per sq. ft.
No. 12 Mesh, No. 27 Wire	.35 per sq. ft.	No. 26 Mesh, No. 31 Wire	.50 per sq. ft.
No. 14 Mesh, No. 20 Wire	2.50 per sq. ft.	No. 26 Mesh, No. 32 Wire	.45 per sq. ft.
No. 14 Mesh, No. 21 Wire	1.75 per sq. ft.	No. 26 Mesh, No. 33 Wire	.40 per sq. ft.
No. 14 Mesh, No. 22 Wire	1.20 per sq. ft.	No. 26 Mesh, No. 34 Wire	.35 per sq. ft.
No. 14 Mesh, No. 23 Wire	.85 per sq. ft.	No. 26 Mesh, No. 35 Wire	.30 per sq. ft.
No. 14 Mesh, No. 24 Wire	.60 per sq. ft.	No. 26 Mesh, No. 36 Wire	.27 per sq. ft.
No. 14 Mesh, No. 25 Wire	.50 per sq. ft.	No. 30 Mesh, No. 28 Wire	1.25 per sq. ft.
No. 14 Mesh, No. 26 Wire	.45 per sq. ft.	No. 30 Mesh, No. 29 Wire	.90 per sq. ft.
No. 14 Mesh, No. 27 Wire	.40 per sq. ft.	No. 30 Mesh, No. 30 Wire	.65 per sq. ft.
No. 14 Mesh, No. 28 Wire	.35 per sq. ft.	No. 30 Mesh, No. 31 Wire	.55 per sq. ft.
No. 14 Mesh, No. 29 Wire	.30 per sq. ft.	No. 30 Mesh, No. 32 Wire	.47 per sq. ft.
No. 16 Mesh, No. 21 Wire	2.50 per sq. ft.	No. 30 Mesh, No. 33 Wire	.42 per sq. ft.
No. 16 Mesh, No. 22 Wire	1.75 per sq. ft.	No. 30 Mesh, No. 34 Wire	.37 per sq. ft.
No. 16 Mesh, No. 23 Wire	1.20 per sq. ft.	No. 30 Mesh, No. 35 Wire	.33 per sq. ft.
No. 16 Mesh, No. 24 Wire	.85 per sq. ft.	No. 30 Mesh, No. 36 Wire	.30 per sq. ft.
No. 16 Mesh, No. 25 Wire	.60 per sq. ft.	No. 35 Mesh, No. 29 Wire	1.75 per sq. ft.
No. 16 Mesh, No. 26 Wire	.50 per sq. ft.	No. 35 Mesh, No. 30 Wire	.90 per sq. ft.
No. 16 Mesh, No. 27 Wire	.45 per sq. ft.	No. 35 Mesh, No. 31 Wire	.75 per sq. ft.
No. 16 Mesh, No. 28 Wire	.40 per sq. ft.	No. 35 Mesh, No. 32 Wire	.55 per sq. ft.
No. 16 Mesh, No. 29 Wire	.35 per sq. ft.	No. 35 Mesh, No. 33 Wire	.48 per sq. ft.
No. 16 Mesh, No. 30 Wire	.30 per sq. ft.	No. 35 Mesh, No. 34 Wire	.45 per sq. ft.
No. 18 Mesh, No. 22 Wire	2.50 per sq. ft.	No. 35 Mesh, No. 35 Wire	.42 per sq. ft.
No. 18 Mesh, No. 23 Wire	1.75 per sq. ft.	No. 35 Mesh, No. 36 Wire	.37 per sq. ft.
No. 18 Mesh, No. 24 Wire	1.20 per sq. ft.	No. 40 Mesh, No. 30 Wire	1.75 per sq. ft.
No. 18 Mesh, No. 25 Wire	.85 per sq. ft.	No. 40 Mesh, No. 31 Wire	1.25 per sq. ft.
No. 18 Mesh, No. 26 Wire	.60 per sq. ft.	No. 40 Mesh, No. 32 Wire	.75 per sq. ft.
No. 18 Mesh, No. 27 Wire	.50 per sq. ft.	No. 40 Mesh, No. 33 Wire	.60 per sq. ft.
No. 18 Mesh, No. 28 Wire	.45 per sq. ft.	No. 40 Mesh, No. 34 Wire	.53 per sq. ft.
No. 18 Mesh, No. 29 Wire	.40 per sq. ft.	No. 40 Mesh, No. 35 Wire	.45 per sq. ft.
No. 18 Mesh, No. 30 Wire	.35 per sq. ft.	No. 40 Mesh, No. 36 Wire	.42 per sq. ft.
No. 18 Mesh, No. 31 Wire	.30 per sq. ft.	No. 45 Mesh, No. 31 Wire	1.75 per sq. ft.
No. 18 Mesh, No. 32 Wire	.27 per sq. ft.	No. 45 Mesh, No. 32 Wire	1.25 per sq. ft.
No. 20 Mesh, No. 23 Wire	2.50 per sq. ft.	No. 45 Mesh, No. 33 Wire	.85 per sq. ft.
No. 20 Mesh, No. 24 Wire	1.75 per sq. ft.	No. 45 Mesh, No. 34 Wire	.65 per sq. ft.
No. 20 Mesh, No. 25 Wire	1.20 per sq. ft.	No. 45 Mesh, No. 35 Wire	.60 per sq. ft.
No. 20 Mesh, No. 26 Wire	.85 per sq. ft.	No. 45 Mesh, No. 36 Wire	.55 per sq. ft.
No. 20 Mesh, No. 27 Wire	.60 per sq. ft.	No. 50 Mesh, No. 34 Wire	.85 per sq. ft.
No. 20 Mesh, No. 28 Wire	.50 per sq. ft.	No. 50 Mesh, No. 35 Wire	.65 per sq. ft.
No. 20 Mesh, No. 29 Wire	.45 per sq. ft.	No. 50 Mesh, No. 36 Wire	.58 per sq. ft.

BRASS AND COPPER WIRE CLOTH—Continued.

No. 60 Mesh, No. 35 Wire.....	.88 per sq. ft.
No. 60 Mesh, No. 36 Wire.....	.70 per sq. ft.
No. 60 Mesh, No. 37 Wire.....	.60 per sq. ft.
No. 70 Mesh, No. 37 Wire.....	.80 per sq. ft.
No. 80 Mesh, No. 38 Wire.....	1.00 per sq. ft.
No. 90 Mesh, No. 39 Wire.....	1.25 per sq. ft.
No. 100 Mesh, No. 40 Wire.....	1.45 per sq. ft.

PRICE LIST OF EXTRA FINE BRASS WIRE CLOTH.

No length less than 100 feet shall be understood to be a roll.

No. 110 Mesh, Plain.....	1.50 per sq. ft.
No. 120 Mesh, Plain.....	1.75 per sq. ft.
No. 130 Mesh, Plain.....	2.25 per sq. ft.
No. 110 Mesh, Twilled.....	1.60 per sq. ft.
No. 120 Mesh, Twilled.....	1.85 per sq. ft.
No. 130 Mesh, Twilled.....	2.35 per sq. ft.
No. 140 Mesh, Twilled.....	2.55 per sq. ft.
No. 150 Mesh, Twilled.....	3.00 per sq. ft.
No. 160 Mesh, Twilled.....	3.60 per sq. ft.
No. 170 Mesh, Twilled.....	4.20 per sq. ft.
No. 180 Mesh, Twilled.....	4.80 per sq. ft.
No. 190 Mesh, Twilled.....	5.40 per sq. ft.
No. 200 Mesh, Twilled.....	6.00 per sq. ft.

IRON AND STEEL SCREEN WIRE CLOTH.

Manufacturers' Price List of All Grades.

No length less than 100 feet shall be understood to be a roll.
The Mesh in Screen Cloth means the space between the wires.

2½ inch space, No. 000 Wire.....	75 cts. per sq. ft.
2½ inch space, No. 00 Wire.....	60 cts. per sq. ft.
2½ inch space, No. 00 Wire.....	64 cts. per sq. ft.
2¼ inch space, No. 0 Wire.....	55 cts. per sq. ft.
2 inch space, No. 0 Wire.....	64 cts. per sq. ft.
2 inch space, No. 1 Wire.....	55 cts. per sq. ft.
1¾ inch space, No. 0 Wire.....	72 cts. per sq. ft.
1¾ inch space, No. 1 Wire.....	64 cts. per sq. ft.
1¾ inch space, No. 2 Wire.....	55 cts. per sq. ft.
1¾ inch space, No. 3 Wire.....	46 cts. per sq. ft.
1½ inch space, No. 1 Wire.....	64 cts. per sq. ft.
1½ inch space, No. 2 Wire.....	55 cts. per sq. ft.
1½ inch space, No. 3 Wire.....	46 cts. per sq. ft.
1½ inch space, No. 4 Wire.....	40 cts. per sq. ft.
1¼ inch space, No. 2 Wire.....	64 cts. per sq. ft.
1¼ inch space, No. 3 Wire.....	55 cts. per sq. ft.
1¼ inch space, No. 4 Wire.....	46 cts. per sq. ft.
1¼ inch space, No. 5 Wire.....	40 cts. per sq. ft.
1 inch space, No. 3 Wire.....	64 cts. per sq. ft.
1 inch space, No. 4 Wire.....	55 cts. per sq. ft.
1 inch space, No. 5 Wire.....	46 cts. per sq. ft.

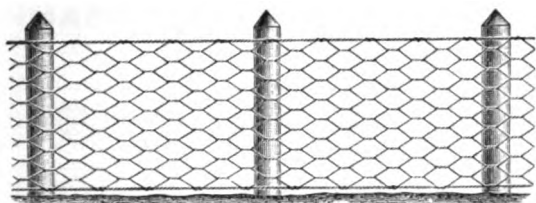
1 inch space, No. 6 Wire.....	40 cts. per sq. ft.
¾ inch space, No. 4 Wire.....	64 cts. per sq. ft.
¾ inch space, No. 5 Wire.....	55 cts. per sq. ft.
¾ inch space, No. 6 Wire.....	48 cts. per sq. ft.
¾ inch space, No. 7 Wire.....	40 cts. per sq. ft.
⅝ inch space, No. 5 Wire.....	64 cts. per sq. ft.
⅝ inch space, No. 6 Wire.....	60 cts. per sq. ft.
⅝ inch space, No. 7 Wire.....	55 cts. per sq. ft.
⅝ inch space, No. 8 Wire.....	48 cts. per sq. ft.
⅝ inch space, No. 9 Wire.....	40 cts. per sq. ft.
⅝ inch space, No. 6 Wire.....	64 cts. per sq. ft.
⅞ inch space, No. 7 Wire.....	55 cts. per sq. ft.
⅞ inch space, No. 8 Wire.....	51 cts. per sq. ft.
⅞ inch space, No. 9 Wire.....	46 cts. per sq. ft.
⅞ inch space, No. 10 Wire.....	40 cts. per sq. ft.
⅞ inch space, No. 8 Wire.....	64 cts. per sq. ft.
⅞ inch space, No. 9 Wire.....	55 cts. per sq. ft.
⅞ inch space, No. 10 Wire.....	48 cts. per sq. ft.
⅞ inch space, No. 11 Wire.....	40 cts. per sq. ft.
⅞ inch space, No. 10 Wire.....	64 cts. per sq. ft.
⅞ inch space, No. 11 Wire.....	55 cts. per sq. ft.
⅞ inch space, No. 12 Wire.....	48 cts. per sq. ft.
⅞ inch space, No. 13 Wire.....	40 cts. per sq. ft.
⅞ inch space, No. 13 Wire.....	46 cts. per sq. ft.

TINNED MILLING GRADE WIRE CLOTH.

Manufacturers' Price List.

No length less than 100 feet shall be considered a roll.

No. 2 Mesh, No. 17 Wire.....	15 cts. per sq. ft.
No. 3 Mesh, No. 19 Wire.....	15 cts. per sq. ft.
No. 4 Mesh, No. 20 Wire.....	15 cts. per sq. ft.
No. 5 Mesh, No. 21 Wire.....	15 cts. per sq. ft.
No. 6 Mesh, No. 22 Wire.....	15 cts. per sq. ft.
No. 8 Mesh, No. 23 Wire.....	15 cts. per sq. ft.
No. 9 Mesh, No. 24 Wire.....	15 cts. per sq. ft.
No. 10 Mesh, No. 25 Wire.....	18 cts. per sq. ft.
No. 12 Mesh, No. 26 Wire.....	18 cts. per sq. ft.
No. 14 Mesh, No. 27 Wire.....	18 cts. per sq. ft.
No. 16 Mesh, No. 28 Wire.....	18 cts. per sq. ft.
No. 18 Mesh, No. 29 Wire.....	18 cts. per sq. ft.
No. 20 Mesh, No. 30 Wire.....	25 cts. per sq. ft.
No. 22 Mesh, No. 31 Wire.....	28 cts. per sq. ft.
No. 24 Mesh, No. 32 Wire.....	28 cts. per sq. ft.
No. 26 Mesh, No. 33 Wire.....	28 cts. per sq. ft.
No. 28 Mesh, No. 34 Wire.....	28 cts. per sq. ft.
No. 30 Mesh, No. 35 Wire.....	28 cts. per sq. ft.
No. 32 Mesh, No. 36 Wire.....	28 cts. per sq. ft.
No. 34 Mesh, No. 36 Wire.....	38 cts. per sq. ft.
No. 36 Mesh, No. 36 Wire.....	40 cts. per sq. ft.
No. 40 Mesh, No. 36 Wire.....	45 cts. per sq. ft.
No. 45 Mesh, No. 36 Wire.....	58 cts. per sq. ft.
No. 50 Mesh, No. 36 Wire.....	62 cts. per sq. ft.



RAILROAD FENCING AND NETTING.

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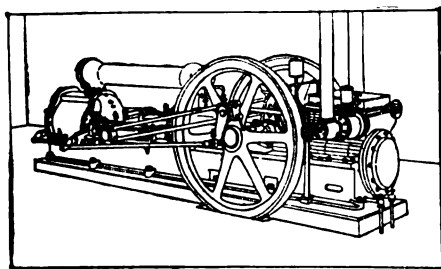
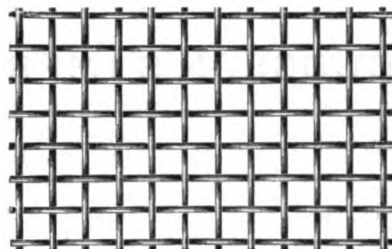
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TRENTON, N. J.

Wire Cloths in All Sizes of Mesh and Wires.

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For Compressing Illuminating Gas—Penn. R. R.; Phil. & Reading R. R.; Labanon Gas Co.; Danbury Gas & Electric Light Co.

For Natural Gas—The Indiana Natural Gas & Oil Co., forcing 116 miles; Central Contract & Finance Co., 50 miles; LaFayette Gas Co., 36 miles; also at Van Wert, Indianapolis, Logansport, Richmond, Ind.; Urbana, Tiffin, Toledo and Kenton, Ohio.; Buffalo and Bolivar, N. Y.

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For Operating Ordnance—The U. S. Proving Stations at Sandy Hook and Annapolis, Fishers Island, N.Y.; Port Royal, N. C.
For Throwing Torpedoes—The U. S. S. Vesuvius and Terror, using 2,500 lbs. pressure.

For Liquefying Carbonic Acid Gas—The Carbon Dioxide & Magnesia Co., Phil., Pa.; Dr. F. Y. Clark; Harvey & Wilcox and Wm. L. Norton, Saratoga, N. Y.

For Compressing Oxygen Gas to 2,000 lbs.—S. S. White Dental Mfg. Co.
For Hydrogen Gas to 2,500 lbs. Pressure—The U. S. Signal Service.

For Pneumatic Locomotives—G. B. Markle & Co.; P. & R. R. R.; Penn. Coal Co.; Dunmore Iron & Steel Co.; H. C. Frick Co.; Yubani Mine, Japan; Cross Creek Coal Co.; Delaware & Hudson Coal Co.; Rochester & Pittsburgh C. & I. Co.; Mill Creek Coal Co. and Mt. Carbon Coal Co.

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DUDGEON'S PATENT ROLLER TUBE EXPANDERS.

Size, inch	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	1 $\frac{7}{8}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$	4	5	6	7
Price, each . . .	20.00	20.00	20.00	25.00	25.00	30.00	35.00	42.00	55.00	60.00	70.00	85.00	120.00	180.00	180.00

These dimensions refer to the external diameter of the tube.

DUDGEON'S IMPROVED ROLLER TUBE EXPANDERS.

Size, inch	1 $\frac{5}{8}$ and 1 $\frac{3}{4}$	1 $\frac{3}{4}$ and 1 $\frac{7}{8}$	1 $\frac{7}{8}$ and 2	2, 2 $\frac{1}{8}$ and 2 $\frac{1}{4}$	2 $\frac{1}{4}$, 2 $\frac{3}{8}$ and 2 $\frac{1}{2}$	2 $\frac{3}{8}$, 2 $\frac{5}{8}$ and 2 $\frac{3}{4}$	2 $\frac{3}{4}$, 2 $\frac{7}{8}$ and 3	3, 3 $\frac{1}{8}$ and 3 $\frac{1}{4}$	3 $\frac{1}{4}$, 3 $\frac{3}{8}$ and 3 $\frac{1}{2}$
Price, each	20.00	20.00	25.00	30.00	36.00	39.00	45.00	52.00	60.00

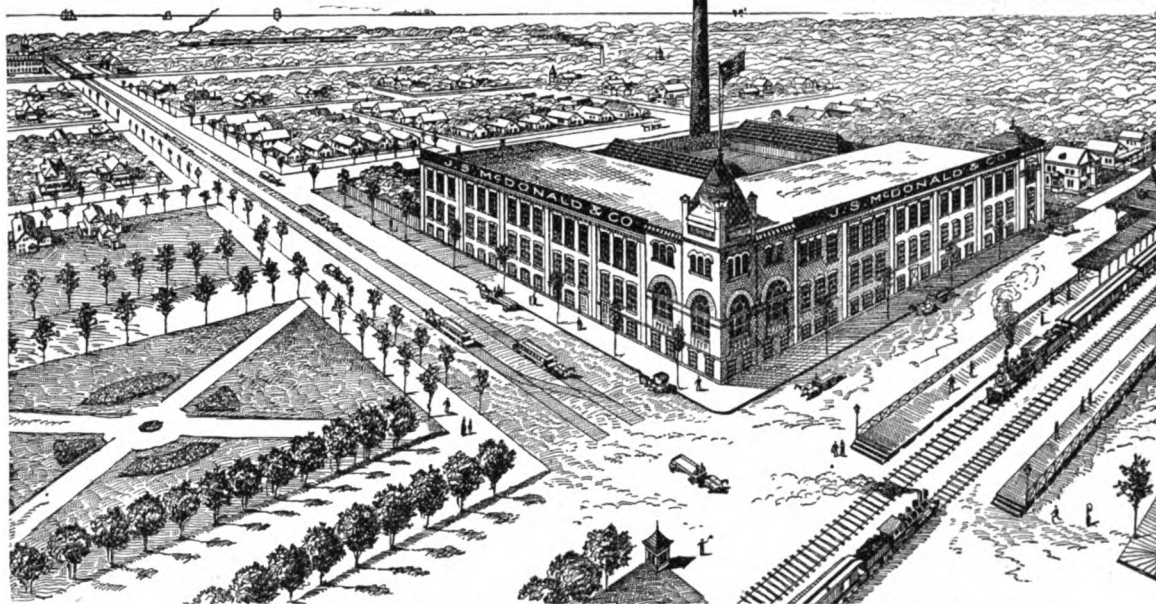
Size, inch	3 $\frac{1}{2}$, 3 $\frac{5}{8}$ and 3 $\frac{3}{4}$	3 $\frac{3}{4}$, 3 $\frac{7}{8}$ and 4	4 and 4 $\frac{1}{4}$	4 $\frac{1}{4}$ and 4 $\frac{1}{2}$	4 $\frac{1}{2}$ and 4 $\frac{3}{4}$	4 $\frac{3}{4}$ and 5	5 and 5 $\frac{1}{2}$	5 $\frac{1}{2}$ and 6	6 and 6 $\frac{1}{2}$
Price, each	70.00	75.00	80.00	85.00	85.00	90.00	100.00	105.00	115.00

ROLLER TUBE EXPANDER.

Diameter, inches	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	1 $\frac{7}{8}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$
Price, each	10.00	10.00	10.00	10.00	10.00	10.00	12.00	14.00	16.00
Diameter, inches	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{3}{4}$	4	4 $\frac{1}{4}$	4 $\frac{1}{2}$	5	6
Price, each	18.00	20.00	23.00	25.00	30.00	35.00	40.00	48.00	

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SEAMLESS STEEL TUBES.

FRACTIONAL WALL USED IN BILLING.			EQUIVALENT IN DECIMAL OF INCH.	PRICE LIST PER FOOT TWELVE INCHES.																									
			NEAREST EQUIVA- LENT IN B. W. GAUGE.	OUTSIDE DIAMETER IN INCHES.						OUTSIDE DIAMETER IN INCHES.						OUTSIDE DIAMETER IN INCHES.						OUTSIDE DIAMETER.							
				3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/8	2 1/4	2 3/8	2 1/2	2 5/8	2 3/4	2 7/8	3	3 1/8	3 1/4	3 5/8	3 3/4	3 7/8	4	
3 3/8 inch...	.03125	20	25	26	27	29	31	33	35	38	40	42	45	48	51	54	57												
3 3/4 inch...	.04875	18	26	27	29	31	33	36	38	40	43	46	49	52	55	58	61												
1 1/8 inch...	.0625	16	27	29	31	33	36	38	41	44	47	49	52	55	58	61	65												
5 8/8 inch...	.078125	14	28	30	34	36	39	42	45	48	50	53	55	59	61	64	68												
3 8/8 inch...	.09375	13	30	33	37	39	42	45	49	51	54	57	59	62	65	69	71	73	77	79	83	89	98	97	101				
1 3/8 inch...	.109375	12	32	35	38	41	44	47	51	54	57	60	63	66	69	72	75	79	82	86	88	94	99	103	107				
1 1/2 inch...	.125	11	33	37	41	45	49	53	57	61	64	67	70	73	77	81	85	89	92	96	101	107	110	115	119	122	129	135	141
5 5/2 inch...	.15625	9	35	39	43	48	52	56	62	66	70	74	77	82	86	90	94	98	102	108	113	118	123	128	133	139	144	150	156
1 3/8 inch...	.1875	7	37	43	49	55	61	67	73	79	85	89	93	97	104	109	113	119	126	132	138	144	150	156	162	168	175	180	189
3 7/8 inch...	.21875	5	39	47	53	60	67	74	81	88	95	100	105	110	117	124	129	136	142	146	154	160	167	173	179	186	193	200	208
1 1/4 inch...	.250	4	42	50	57	65	73	81	89	97	104	110	116	122	130	138	146	152	158	164	171	177	183	189	195	203	211	219	227
3 9/8 inch...	.28125	2	..	..	..	69	77	85	94	103	110	117	124	132	141	150	159	166	173	180	187	194	201	208	215	225	234	243	252
1 5/8 inch...	.3125	1	..	..	..	73	81	89	99	108	116	124	132	142	152	162	171	179	187	195	203	211	219	227	235	246	256	266	276
1 1/2 inch...	.34375	0	..	..	..	..	85	96	107	116	124	132	141	151	161	172	181	190	199	208	217	227	236	245	253	264	274	284	295
3/8 inch...	.375	00	..	..	..	..	89	102	114	124	132	140	150	160	170	181	191	201	211	221	231	242	252	262	272	282	292	302	313
1 7/8 inch...	.4375	000	..	..	..	..	..	110	126	136	146	156	166	177	187	199	211	223	235	248	258	268	278	288	298	308	321	331	343
1/2 inch...	.5	0000	..	..	..	..	..	..	134	146	158	170	183	196	207	219	231	244	256	268	280	292	304	317	329	341	353	365	378
1 9/8 inch...	.5625	..	..	..	..	..	..	..	..	..	168	183	197	211	225	237	250	261	276	290	304	317	329	343	357	370	382	394	408
5/8 inch...	.625	.....	..	..	..	..	..	..	..	..	..	..	213	227	242	255	270	284	298	313	327	341	355	369	384	400	418	434	451

SEAMLESS STEEL TUBES—Continued.

NEAREST GAUGE NUMBER BY B. W. G.	Thickness in Fractional Parts of an Inch.	WEIGHT IN POUNDS LINEAL FOOT SEAMLESS STEEL TUBES.													
		OUTSIDE DIAMETER IN INCHES.						OUTSIDE DIAMETER IN INCHES.							
		$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	2	$2\frac{1}{8}$		
20	$\frac{1}{8}$	.240	.282	.323	.365	.407	.449	.490	.532	.574	.615	.657	.699		
18	$\frac{3}{16}$	.352	.415	.477	.540	.602	.665	.727	.790	.852	.915	.977	1.040		
16	$\frac{1}{4}$	.459	.542	.625	.709	.792	.876	.959	1.042	1.126	1.209	1.292	1.376		
14	$\frac{5}{16}$	.560	.665	.769	.873	.978	1.082	1.186	1.290	1.394	1.499	1.604	1.707		
13	$\frac{3}{8}$	.657	.782	.907	1.032	1.157	1.283	1.408	1.533	1.658	1.783	1.908	2.033		
12	$\frac{7}{16}$	.748	.894	1.040	1.186	1.332	1.478	1.642	1.770	1.916	2.062	2.208	2.354		
11	$\frac{1}{2}$	.834	1.001	1.168	1.335	1.502	1.669	1.836	2.003	2.170	2.337	2.504	2.671		
9	$\frac{5}{8}$	.991	1.199	1.408	1.617	1.825	2.034	2.243	2.451	2.660	2.868	3.077	3.286		
7	$\frac{3}{4}$	1.126	1.376	1.627	1.877	2.127	2.378	2.628	2.878	3.129	3.379	3.629	3.879		
5	$\frac{7}{8}$	1.241	1.533	1.825	2.117	2.409	2.701	2.993	3.285	3.577	3.869	4.161	4.453		
4	$1\frac{1}{8}$	1.335	1.669	2.002	2.336	2.670	3.004	3.338	3.671	4.005	4.339	4.673	5.006		
2	$1\frac{1}{4}$	1.408	1.783	2.159	2.534	2.910	3.285	3.661	4.036	4.412	4.787	5.163	5.538		
1	$1\frac{3}{8}$	1.460	1.877	2.295	2.712	3.129	3.546	3.963	4.381	4.798	5.215	5.632	6.049		
0	$1\frac{1}{2}$		1.951	2.409	2.868	3.327	3.785	4.244	4.703	5.162	5.621	6.079	6.538		
00	$1\frac{3}{4}$		2.002	2.503	3.004	3.505	4.005	4.507	5.007	5.507	6.008	6.509	7.009		
000	$1\frac{7}{8}$			2.628	3.212	3.797	4.381	4.965	5.549	6.133	6.717	7.301	7.885		
0000	2				3.337	4.005	4.672	5.340	6.008	6.675	7.342	8.010	8.678		
	$2\frac{1}{8}$						4.881	5.632	6.383	7.134	7.885	8.636	9.387		
								5.841	6.676	7.510	8.345	9.179	10.013		

Nearest Gauge Number by B. W. G.	Thickness in Fractional Parts of an Inch.	WEIGHT IN POUNDS LINEAL FOOT SEAMLESS STEEL TUBES.													
		OUTSIDE DIAMETER IN INCHES.						OUTSIDE DIAMETER IN INCHES.							
		$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{3}{8}$	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$	4
20	$\frac{1}{8}$	.740	.782	.824	.866	.907	.949								
18	$\frac{3}{16}$	1.102	1.165	1.227	1.290	1.352	1.415	1.477							
16	$\frac{1}{4}$	1.459	1.543	1.626	1.709	1.793	1.876	1.960	2.043						
14	$\frac{5}{16}$	1.811	1.915	2.025	2.129	2.233	2.337	2.441	2.546	2.650					
13	$\frac{3}{8}$	2.158	2.283	2.409	2.534	2.658	2.784	2.909	3.034	3.159	3.284				
12	$\frac{7}{16}$	2.500	2.646	2.792	2.938	3.084	3.230	3.376	3.522	3.668	3.814	3.958			
11	$\frac{1}{2}$	2.838	3.005	3.172	3.339	3.506	3.673	3.840	4.007	4.174	4.341	4.508	4.675	4.850	5.010
9	$\frac{5}{8}$	3.494	3.702	3.911	4.120	4.328	4.537	4.746	4.954	5.163	5.371	5.580	5.788	5.996	6.204
7	$\frac{3}{4}$	4.130	4.380	4.630	4.881	5.131	5.382	5.632	5.882	6.132	6.382	6.634	6.885	7.136	7.386
5	$\frac{7}{8}$	4.745	5.037	5.329	5.621	5.913	6.205	6.495	6.787	7.079	7.371	7.666	7.959	8.252	8.544
4	$1\frac{1}{8}$	5.340	5.674	6.008	6.342	6.675	7.009	7.343	7.677	8.011	8.345	8.678	9.013	9.347	9.679
2	$1\frac{1}{4}$	5.914	6.289	6.665	7.040	7.416	7.792	8.167	8.542	8.918	9.294	9.669	10.047	10.423	10.795
1	$1\frac{3}{8}$	6.467	6.884	7.301	7.718	8.135	8.553	8.970	9.387	9.805	10.221	10.639	11.060	11.475	11.890
0	$1\frac{1}{2}$	6.997	7.456	7.915	8.373	8.832	9.291	9.750	10.209	10.667	11.126	11.588	12.050	12.497	12.964
00	$1\frac{3}{4}$	7.510	8.011	8.512	9.013	9.513	10.014	10.515	11.016	11.517	12.017	12.517	13.018	13.518	14.020
000	$1\frac{7}{8}$	8.469	9.053	9.638	10.221	10.806	11.390	11.974	12.558	13.142	13.726	14.311	14.895	15.478	16.065
0000	2	9.345	10.013	10.680	11.347	12.015	12.683	13.350	14.018	14.685	15.353	16.022	16.690	17.357	18.023
	$2\frac{1}{8}$	10.138	10.889	11.640	12.391	13.142	13.893	14.644	15.395	16.146	16.897	17.649	18.401	19.152	19.904
	$2\frac{3}{8}$	10.848	11.682	12.517	13.352	14.186	15.021	15.855	16.690	17.524	18.369	19.193	20.029	20.871	21.695

SEAMLESS STEEL TUBING—Continued. HOT DRAWN.

THICKNESS OF WALL.	WEIGHT IN LBS. PER LINEAL FOOT OF SEAMLESS STEEL TUBES.													
	OUTSIDE DIAMETER IN INCHES.													
	4	4¼	4½	4¾	5	5¼	5½	5¾	6	6¼	6½	6¾	7	
⅜	7.635	8.136	8.636	9.137	9.638	10.139	10.639	11.140	11.641	12.141	12.642	13.143	13.644	
¼	10.014	10.681	11.348	12.016	12.684	13.351	14.019	14.686	15.354	16.021	16.689	17.357	18.024	
⅓	12.308	13.143	13.977	14.812	15.646	16.481	17.316	18.150	18.985	19.820	20.655	21.489	22.324	
⅔	14.520	15.521	16.522	17.524	18.525	19.527	20.528	21.530	22.531	23.532	24.533	25.535	26.536	
⅞	16.648	17.816	18.984	20.152	21.321	22.489	23.657	24.826	25.994	27.162	28.33	29.499	30.667	
½	18.692	20.027	21.362	22.698	24.033	25.368	26.703	28.038	29.373	30.709	32.044	33.379	34.714	
⅝	22.531	24.200	25.868	27.538	29.207	30.876	32.545	34.214	35.884	37.553	39.222	40.891	42.56	
¾	26.036	28.038	30.041	32.043	34.046	36.049	38.051	40.054	42.056	44.059	46.062	48.064	50.067	
⅞	29.207	31.543	33.88	36.217	38.554	40.891	43.227	45.564	47.901	50.238	52.575	54.912	57.248	
1	32.044	34.714	37.385	40.055	42.725	45.396	48.066	50.736	53.407	56.077	58.747	61.418	64.088	

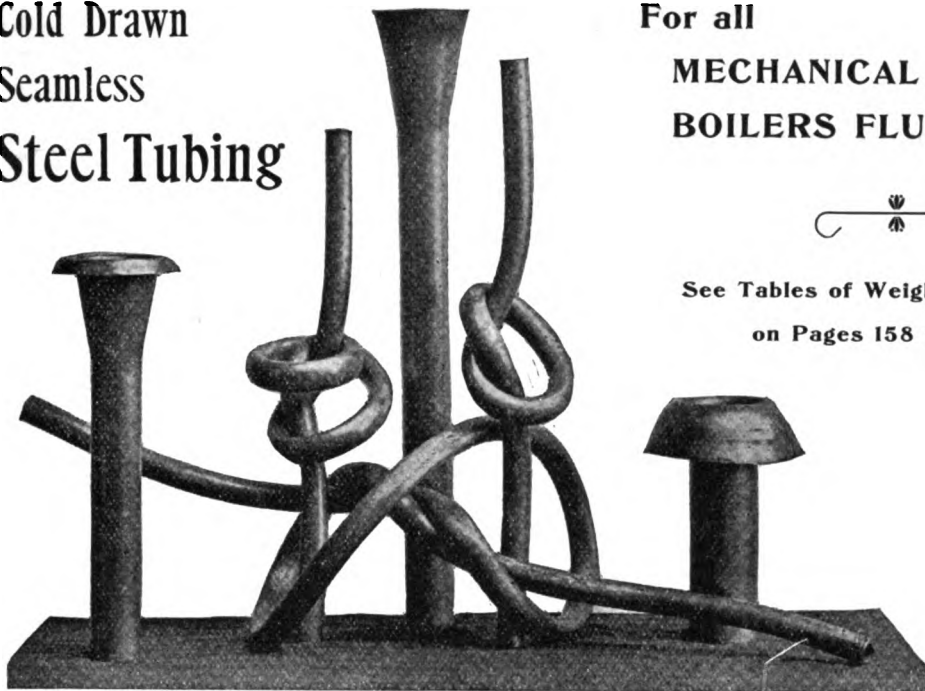
For special Lengths, Diameters and Gauges, Estimates given on receipt of Specifications.

SEAMLESS STEEL TUBING—Continued. HOT DRAWN.

THICKNESS OF WALL.	WEIGHT IN LBS. PER LINEAL FOOT OF SEAMLESS STEEL TUBES.												
	OUTSIDE DIAMETER IN INCHES.												
	7¼	7½	7¾	8	8¼	8½	8¾	9	9¼	9½	9¾	10	
⅜	14.144	14.645	15.146	15.646	16.147	16.648	17.148	17.649	18.15	18.650	19.151	19.652	
¼	18.691	19.36	20.026	20.694	21.362	22.029	22.696	23.365	24.031	24.699	25.367	26.036	
⅓	23.159	23.993	24.828	25.663	26.497	27.332	28.167	29.002	29.836	30.671	31.506	32.340	
⅔	27.538	28.539	29.540	30.542	31.543	32.544	33.546	34.547	35.549	36.55	37.552	38.553	
⅞	31.835	33.003	34.172	35.388	36.506	37.674	38.842	40.01	41.178	42.346	43.514	44.682	
½	36.049	37.385	38.72	40.055	41.39	42.725	44.061	45.396	46.731	48.066	49.401	50.737	
⅝	44.229	45.898	47.568	49.237	50.906	52.575	54.244	55.913	57.582	59.251	60.92	62.589	
¾	52.069	54.072	56.075	58.077	60.080	62.082	64.085	66.088	68.09	70.093	72.095	74.098	
⅞	59.585	61.922	64.259	66.596	68.932	71.269	73.606	75.943	78.28	80.617	82.953	85.29	
1	66.759	69.429	72.099	74.770	77.44	80.11	82.781	85.451	88.121	90.792	93.462	96.132	

Present capacity up to 8 inches in diameters; equipment contemplated to 10 inches and above.

Cold Drawn
Seamless
Steel Tubing



For all
MECHANICAL PURPOSES.
BOILERS FLUES.



See Tables of **Weights and Prices,**
on Pages 158 to 162.



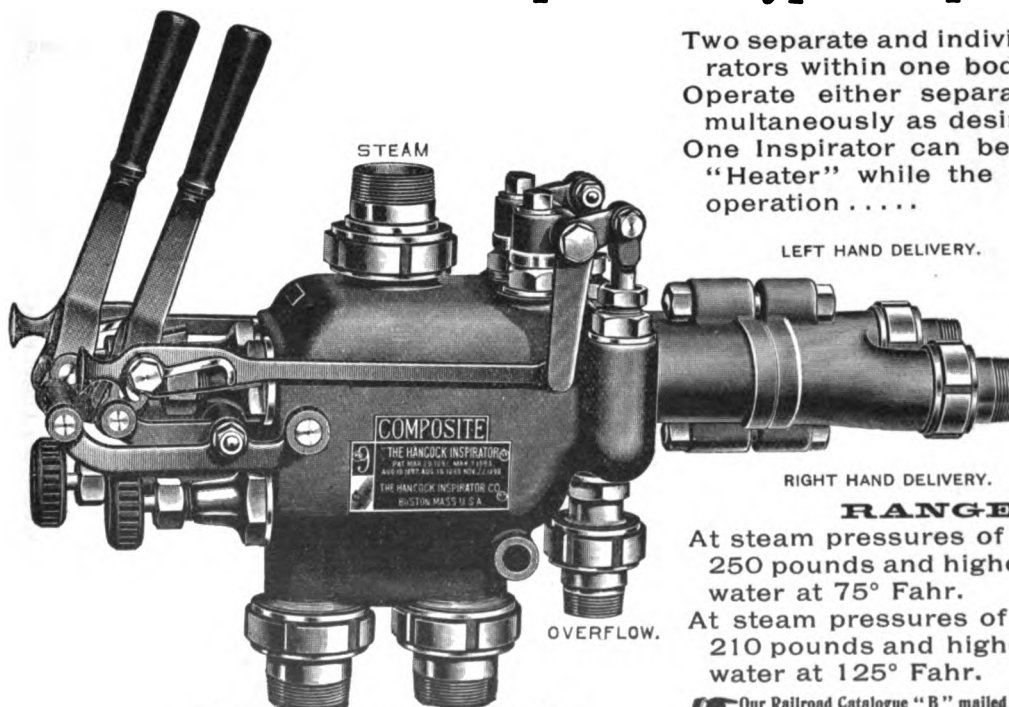
Write for
PRICES.

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SAMPLES.



SHELBY STEEL TUBE CO., Cleveland, Ohio.
NEW YORK, CHICAGO, BOSTON, BIRMINGHAM, ENG.

The Hancock "Composite" Type Inspirator.



Two separate and individual Inspi-
rators within one body.
Operate either separately or si-
multaneously as desired.
One Inspirator can be used as a
"Heater" while the other is in
operation

LEFT HAND DELIVERY.

RIGHT HAND DELIVERY.

RANGE.

At steam pressures of from 35 to
250 pounds and higher with feed
water at 75° Fahr.

At steam pressures of from 60 to
210 pounds and higher with feed
water at 125° Fahr.

Our Railroad Catalogue "B" mailed free upon application.

LEFT HAND SUCTION. RIGHT HAND SUCTION.

THE HANCOCK INSPIRATOR CO., 85, 87, 89 Liberty St., New York, U. S. A.

SEAMLESS STEEL TUBES—Continued.

BIRMINGHAM WIRE GAUGE (STUBBS.)	EQUIVALENT IN FRACTION OF INCH.	Price List of Seamless Cold Drawn Steel Boiler Tubes for Locomotive, Marine and Stationary Boilers.															
		EXTERNAL DIAMETER IN INCHES.															
		$\frac{7}{8}$	1 in.	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3 in.	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4 in.
16	.065	28	30	32	35	37	39	43	47	51	55	59	65	71	77	83	93
15	.072	29	32	34	37	39	42	46	51	55	59	65	71	77	83	93	101
14	.083	30	34	36	39	42	45	50	55	59	65	71	77	83	88	99	107
13	.095	32	37	39	42	45	49	54	59	65	71	77	83	88	99	107	113
12	.109	33	38	41	44	47	51	57	63	69	75	82	88	95	104	113	120
11	.120	35	39	43	46	49	54	60	66	73	80	87	95	104	113	120	129
10	.134	37	41	45	49	53	57	64	70	77	85	92	101	110	119	129	141
9	.148	39	43	48	52	56	62	70	77	86	94	102	113	123	133	144	156
8	.165	40	46	51	56	61	67	77	85	95	103	114	126	136	147	159	171
7	.180	43	49	55	61	67	73	85	93	104	113	126	138	150	162	175	189
6	.203	48	55	63	71	79	88	101	111	124	139	153	167	178	192	208	227
	$\frac{1}{4}$ inch	51	59	68	78	88	99	113	124	140	156	171	183	195	211	227	247
	$\frac{5}{16}$ inch	53	62	72	83	94	106	121	133	150	167	183	195	211	227	247	269
	$\frac{3}{8}$ inch	55	65	76	88	100	113	129	142	160	178	195	211	227	247	269	293
	$\frac{7}{16}$ inch	57	68	80	93	106	120	137	151	170	189	207	223	240	258	277	303
	$\frac{1}{2}$ inch	59	71	84	98	112	127	145	160	180	200	219	237	255	273	293	321
		61	74	88	103	118	134	153	169	190	211	231	250	269	288	308	338

Price (cents) per Lineal Foot.

BIRMINGHAM WIRE GAUGE.	EQUIVALENT IN FRACTION OF INCH.	Weight Sheet of Seamless Cold Drawn Steel Tubes for Locomotive, Marine and Stationary Boilers.															
		EXTERNAL DIAMETER IN INCHES.															
		$\frac{7}{8}$	1 in.	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3 in.	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4 in.
16	.065	.65	.74	.85	.91	1.00	1.18	1.32	1.53	1.71	1.85	2.02	2.21	2.42	2.61	2.87	3.21
15	.072	.72	.82	.91	1.01	1.10	1.31	1.47	1.66	1.84	2.05	2.25	2.42	2.61	2.87	3.27	3.60
14	.083	.82	.93	1.01	1.15	1.26	1.49	1.70	1.91	2.12	2.36	2.59	2.79	3.02	3.27	3.74	4.02
13	.095	.92	1.05	1.18	1.31	1.43	1.69	1.92	2.17	2.42	2.70	2.94	3.19	3.42	3.74	4.25	4.60
12	.109	1.04	1.19	1.34	1.48	1.63	1.92	2.19	2.52	2.73	3.08	3.35	3.68	3.91	4.25	4.83	5.16
11	.120	1.13	1.29	1.46	1.61	1.79	2.10	2.41	2.72	3.04	3.38	3.70	4.03	4.32	4.63	5.31	5.62
10	.134	1.25	1.43	1.60	1.78	1.99	2.29	2.69	3.05	3.41	3.74	4.14	4.44	4.83	5.20	6.02	6.32
9	.148	1.35	1.55	1.75	1.95	2.16	2.55	2.95	3.34	3.72	4.14	4.52	4.92	5.28	5.69	6.61	6.91
8	.165	1.48	1.70	1.92	2.14	2.34	2.81	3.25	3.70	4.11	4.56	5.01	5.43	5.86	6.31	7.35	7.65
7	.180	1.58	1.83	2.07	2.31	2.55	3.04	3.52	4.00	4.48	4.97	5.44	5.91	6.38	6.85	8.01	8.31
6	.203	1.74	2.01	2.28	2.56	2.82	3.37	3.92	4.46	5.02	5.52	6.09	6.59	7.19	7.63	9.00	9.30
	$\frac{1}{4}$ inch	1.85	2.14	2.44	2.74	3.04	3.67	4.24	4.86	5.44	5.96	6.54	7.04	7.64	8.14	9.64	9.94
	$\frac{5}{16}$ inch	1.96	2.26	2.56	2.86	3.16	3.83	4.42	5.06	5.64	6.16	6.74	7.24	7.84	8.34	9.94	10.24
	$\frac{3}{8}$ inch	2.07	2.37	2.67	2.97	3.27	3.98	4.58	5.24	5.82	6.32	6.92	7.42	8.02	8.52	10.24	10.54
	$\frac{7}{16}$ inch	2.18	2.48	2.78	3.08	3.38	4.13	4.74	5.42	6.00	6.50	7.10	7.60	8.20	8.70	10.54	10.84
	$\frac{1}{2}$ inch	2.29	2.59	2.89	3.19	3.49	4.28	4.89	5.58	6.16	6.66	7.26	7.76	8.36	8.86	10.84	11.14

Weight per Lineal Foot.

JACKS—BARRETT.

NUMBER.	Height with Bar Down. In Inches.	Height with Bar Raised. In Inches.	Size of Bar. In Inches.	Raise of Bar. In Inches.	Weight. In Lbs.	Capacity. In Tons.	PRICE.
1	24	37½	1½x1½	13½	60	10	18.00
2	20½	30½	1½x1½	10	68	10	25.00
3	28½	41½	2 x1½	15	80	12	30.00
4	20½	30½	2¼x2	10	95	15	35.00
5	28	43	2¼x2	15	110	15	40.00
6	31	50	1½x1½	19	95	15	32.00
8	11	16	1½x1½	5	47	10	22.00
10	24½	38½	1½x1½	14	67	10	25.00
12	17¾	25¾	1½x1½	8	50	10	17.00
17	24	37¾	1½x1½	13¾	60	10	18.00
18	21	31	1½x1½	10	65	10	25.00
19	28	45½	2 x1½	17½	90	15	35.00
20	31	50	1½x1½	19	95	15	32.00

DUDGEON'S HYDRAULIC JACKS.

TONS LIFT.	RUN OUT.	BASE JACK.			PLAIN JACK.		
		Height.	Weight.	Price.	Height.	Weight.	Price.
4	12	23	61	60.00	24	46	60.00
4	24	87	80	65.00	37	60	65.00
7	12	25	82	80.00	25	64	70.00
7	18	31	100	85.00	32	72	73.00
7	24	38	120	90.00	38	80	75.00
10	12	25	109	95.00	25	80	80.00
10	18	31	125	110.00	32	98	95.00
10	24	39	145	125.00	39	110	110.00
15	12	25	135	125.00	28	102	100.00
15	18	32	158	150.00	32	120	125.00
15	24	39	176	175.00	39	140	150.00
20	12	26	169	150.00	28	127	120.00
20	18	33	198	175.00	33	155	145.00
20	24	39	228	200.00	39	180	170.00
30	9	22	210	170.00	22	146	150.00
30	12	26	259	200.00	26	194	175.00
40	18	33	300	235.00	33	260	210.00
40	12	27	320	240.00	27	280	210.00
40	18	33	360	280.00	34	320	250.00

CLAW OR GROUND-LIFTING JACK.

TONS LIFT.	RUN OUT.	HEIGHT.	WEIGHT.	PRICE.
4	12	24	64	60.00
4	24	37	94	65.00
7	12	25	90	85.00
7	18	31	110	88.00
7	24	38	123	90.00
10	12	25	123	100.00
10	18	32	144	120.00
10	24	39	170	145.00
15	12	26	162	150.00
15	18	32	189	185.00
20	12	26	207	200.00
20	18	33	245	240.00
30	12	26	310	250.00

CAR BRASS JACK.

7	5	11	56	75.00
10	5	12	60	90.00

JOYCE-CRIDLAND JACKS.

Lever Jacks.

NUMBER	Height. Inches.	Rise of Bar. Inches.	Size of Bar. Inches, Square.	Capacity. Tons.	Weight. Pounds.	PRICE.
1 A.....	16	8	1 1/4	2	25	10.00
2 A.....	18 1/2	11	1 1/4	2	27	10.00
3.....	11 1/2	4	1 1/2	4	29	10.00
4.....	22 1/2	12	1 1/2	4	43	16.00
4 A.....	18 1/2	10 1/2	1 1/2	4	38	16.00
10.....	27	16 1/4	1 3/4	10	76	23.00
10 A.....	22 1/2	11 1/2	1 3/4	10	67 1/2	23.00
6.....	26 1/2	14	2	15	94	26.00
7.....	35	25 1/2	2	15	113 1/2	30.00

Trip Track Jacks.

4 B.....	22 1/2	12	1 1/2	4	45	16.00
4 C.....	19	9	1 1/2	4	39	16.00
11.....	27	16	1 3/4	10	81	23.00

Compound Lever Jacks.

NUMBER.	Height. Inches.	Rise of Bar. Inches.	Size of Bar. Inches, Round.	Capacity. Tons.	Weight. Pounds.	PRICE.
8.....	29	14	2	12	100	30.00
9.....	29	14	2	12	100	30.00

Toothed Trip Track Jacks.

29.....	22 1/2	10 1/2	1 5/8	5	44	15.00
30.....	24	12	2	10	80	20.00

No. O. Screw Track Jack.

Diameter of Screw. Inches.	Rise of Screw. Inches.	Weight. Pounds.	Price.
1 1/2	15	36	6.00

JOYCE-CRIDLAND JACKS—Continued.

Double Movement Screw Jacks.

NUMBER.	Height. Inches.	Rise. Inches.	Diameter. Inches.	Capacity. Tons.	Weight. Lbs.	Price with Fork Lever.	Price with Six Way Head.	Price with Spring Ratchet.
12	10	4	2	8	20	10.00	8.00	15.00
13	12	6	2	8	22	10.00	8.00	15.00
14	13	7	2	8	25	10.00	8.00	15.00
15	13	7	2	8	20	10.00	8.00	15.00
16	16	10	2	8	33	17.00	25.00	15.00
17	20	13	2	8	41	18.00	26.00	16.00
18	19	8	2	8	49	20.00		28.00
19	16	9	2½	25	47		17.00	25.00
20	20	12	2½	25	55		22.00	30.00
21	24	16	2½	25	65		27.00	35.00
21½	36	24	2½	25	85		37.00	45.00
22	27	18	3	50	125		35.00	45.00
23	33	24	3	50	145		40.00	60.00

Telescope Jacks.

NUMBER.	Height. Inches.	Rise. Inches.	Capacity. Tons.	Weight. Lbs.	Price with Six Way Head.	Price with Spring Ratchet.
44	8	8	6	18	12.00	17.00
45	12	12	8	32	15.00	23.00
47	18	18	10	65	20.00	28.00
50	16	16	25	140	53.00	65.00

Bell Base Screw Jacks.

NUMBER.	Height. Inches.	Diameter of Screw Inches.	Rise. Inches.	Weight. Lbs.	Capacity. Tons.	Price with Six Way Head.	Price with Spring Ratchet.
101	10	2	4½	23	8	5.00	11.00
102	12	2	6½	26	8	5.50	11.50
111	10	2¼	4½	24	15	5.75	13.75
118	12	2¼	6	29	15	6.35	14.35
120	10	2½	3½	35	25	7.50	15.50
121	12	2½	5½	33	25	8.25	16.25
122	14	2½	7	37	25	9.00	17.00
123	16	2½	9	42	25	9.75	17.75
124	18	2½	11	46	25	10.50	18.50
125	20	2½	13	51	25	11.25	19.25
126	22	2½	15	57	25	12.00	20.00
127	24	2½	17	63	25	12.75	20.75
130	30	2½	23	81	25	15.00	23.00
132	12	3	4	49	50	12.00	22.00
133	14	3	6	55	50	13.00	23.00
134	16	3	8	61	50	14.00	24.00
135	18	3	10	67	50	15.00	25.00
136	20	3	12	77	50	16.00	26.00
137	22	3	14	83	50	17.00	27.00
138	24	3	16	89	50	18.00	28.00
140	28	3	20	118	50	20.00	30.00
141	30	3	22	128	50	21.00	31.00
171	22	4½	11	150	75	65.00	

JOYCE-CRIDLAND JACKS—Continued.

Rapid Moving Screw Jacks.

NUMBER.	Height. Inches.	Rise. Inches.	Diameter of Screw.	Weight. Lbs.	Capacity. Tons.	Price with Spring Ratchet.	Price with Six Way Head.	Price of Steel Ground Lift Extra.
24	22	11	2	48	8	35.00	27.00	
25	27	15	2½	90	25	50.00	40.00	10.00
26	29	14	3	164	50	78.00	.....	12.00
27	36¼	24	2½	137	25	65.00	55.00	

Traversing Jacks.

RAPID MOVING TYPE.

NUMBER.	Height. Inches.	Safe Elevation. Inches.	Horizontal Movem't. Inches.	Weight. Pounds.	Capacity. Tons.	PRICE.
35	27	10	15	150	25	75.00
41	30½	11	15	300	50	150.00

DOUBLE MOVEMENT TYPE.

36	23	10	15	148	25	68.00
42	28	12	15	280	50	125.00

TELESCOPE TYPE.

37	15	10	15	120	8	65.00
37 A	15	10	15	115	8	55.00
60	18	14	15	140	15	75.00
60 A	18	14	15	135	15	68.00

Travers Bases.

NUMBER.	Horizontal Movem't. Inches.	Size of Plate. Inches.	Weight. Pounds.	Capacity. Tons.	PRICE.
40	15	10x12	90	25	40.00
43	15	13x13	180	50	60.00

Toggle Trip Track Jack.

NUMBER.	Height. Inches.	Rise of Bar. Inches.	Size of Bar. Inches. Square.	Capacity. Tons.	Weight. Pounds.	PRICE.
38	23½	11¼	1½	5	62	15.00
39	25½	12	1¾	10	86	20.00

JOYCE-CRIDLAND JACKS—Continued.

Geared Lever Jacks.

NUMBER	Height. Inches.	Rise of Bar. Inches.	Rise of Bar. Per Stroke of Lever.	Size of Bar. Inches. Square.	Capacity. Tons.	Weight. Pounds.	Price Without Footlift.	Price With Footlift.
165.....	12	5	$\frac{1}{2}$	$2\frac{1}{4} \times 2$	15	75	30.00	
168.....	$26\frac{1}{2}$	17	$\frac{1}{2}$	$2\frac{1}{4} \times 2$	15	105	.....	35.00
171.....	35	$23\frac{1}{2}$	$\frac{1}{2}$	$2\frac{1}{4} \times 2$	15	145	.....	40.00
180.....	12	5	$\frac{1}{4}$	$2\frac{1}{4} \times 2$	15	90	35.00	
183.....	26	15	$\frac{1}{4}$	$2\frac{1}{4} \times 2$	15	120	.....	40.00
184.....	27	18	$\frac{1}{4}$	$2\frac{1}{2} \times 2\frac{1}{4}$	20	150	50.00	
195.....	33	$22\frac{1}{2}$	$\frac{1}{4}$	$2\frac{1}{2} \times 2\frac{1}{4}$	20	183	55.00	
200.....	$27\frac{1}{2}$	15	$\frac{1}{4}$	$3 \times 2\frac{1}{2}$	30	222	75.00	
201.....	36	$24\frac{1}{2}$	$\frac{1}{4}$	$3 \times 2\frac{1}{2}$	30	265	85.00	
202.....	31	$19\frac{1}{2}$	$\frac{1}{4}$	$3 \times 2\frac{1}{2}$	30	250	85.00	

Truck Jack.

NUMBER.	Height of Foot When Down.	Rise of Bar. Inches.	Size of Bar. Inches. Square.	Weight. Pounds.	Capacity. Tons.	PRICE.
221.....	25	43	2	270	12	60.00

Broad Base Hydraulic Jacks.

Capacity. Tons.	Rise. Inches.	Height. Inches.	Weight. Lbs.	PRICE.
10	12	25	97	71.00
10	18	31	112	82.00
10	22	35	122	90.00
10	24	37	127	93.00
15	12	$25\frac{1}{2}$	140	94.00
15	18	$32\frac{3}{4}$	150	112.00
15	22	$35\frac{1}{2}$	170	127.00
15	24	$37\frac{1}{2}$	179	135.00
20	12	$25\frac{1}{2}$	187	112.00
20	18	33	212	131.00
20	24	$37\frac{1}{2}$	235	150.00
30	9	$23\frac{1}{2}$	195	128.00
30	12	$26\frac{1}{2}$	209	150.00
30	18	$32\frac{1}{2}$	237	188.00
40	12	$26\frac{1}{2}$	220	169.00
40	16	$30\frac{1}{2}$	232	193.00
40	18	$32\frac{1}{2}$	250	200.00

Small Base Hydraulic Jacks.

10	12	25	84	57.00
10	18	31	109	64.00
10	24	37	124	72.00
15	12	$25\frac{1}{2}$	120	70.00
15	18	$31\frac{1}{2}$	136	82.00
20	12	$25\frac{1}{2}$	142	85.00
20	18	$31\frac{1}{2}$	166	100.00
30	9	$22\frac{1}{2}$	149	108.00
30	12	$25\frac{3}{4}$	164	125.00
40	12	26	174	145.00

JOYCE-CRIDLAND JACKS—Continued.

Ground Lift Hydraulic Jacks.

Capacity. Tons.	Rise Inches.	Height. Inches.	Weight. Lbs.	Price.
10	12	26	130	78.00
10	18	31	150	87.00
15	12	26	187	115.00
15	18	31½	213	130.00
20	12	25½	210	155.00
30	12	25¾	255	180.00
40	12	26	267	180.00

Outside Pump Hydraulic Jack.

Capacity. Tons.	Rise. Inches.	Height. Inches.	Weight. Lbs.	Price.	Price with Ground Lift.
30.....	9	17	210	128.00	153.00
30.....	12	20	224	150.00	180.00
30.....	18	26	250	188.00	215.00
40.....	12	20	235	169.00	
40.....	16	24	250	193.00	
40.....	18	26	260	200.00	220.00
60.....	9	19	276	190.00	220.00
60.....	12	22	304	205.00	235.00
60.....	18	28	360	235.00	265.00
80.....	12	23	.....	244.00	
80.....	18	29	.....	280.00	
100.....	12	24	.....	280.00	
100.....	18	30	.....	320.00	

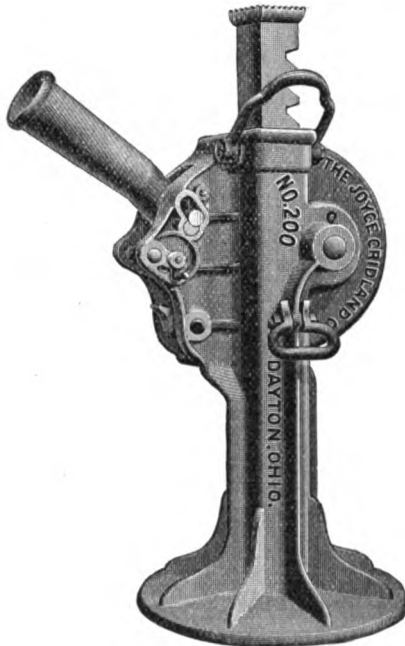
All the above Hydraulic Jacks are listed with single pumps.

For double pumps, add \$35.00 to list price.

THE JOYCE-CRIDLAND CO.

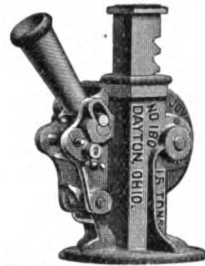
DAYTON, OHIO.

Manufacturers of all kinds of Lever Jacks, Screw Jacks, Patent Gear Jacks, and Hydraulic Jacks of all capacities and for all purposes.



No. 200. Jack for Car and Heavy Wrecking, and Locomotive use. Capacity 80 tons. Automatic Lowering.

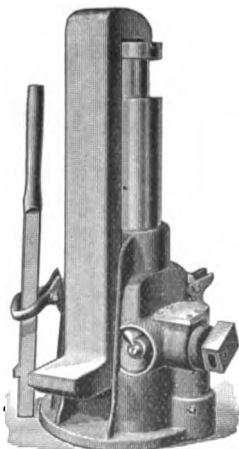
**CATALOGUE
FREE
UPON APPLICATION.**



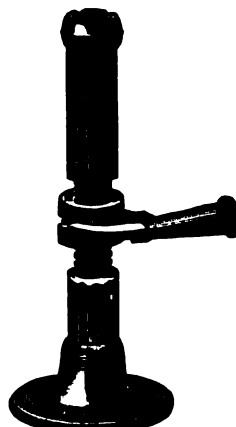
No. 180. Truck-Box Jack
Capacity 15 tons.
Automatic Lowering.



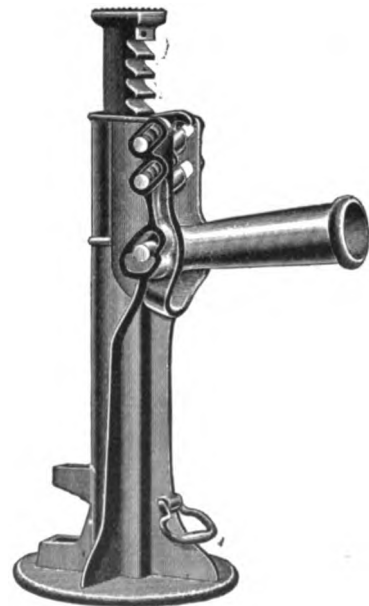
No. 171. Light Wrecking Car and Heavy Track Jack.
Capacity 15 tons.
Automatic Lowering.



Outside Double-Pump
Hydraulic Jack.



Double Movement
Screw Jack.



No. 6 Jack.
Heavy Truck and Car Jack.

CLEVELAND CITY FORGE AND IRON COMPANY'S SPECIAL PRICE LIST.

TO RAILROAD COMPANIES AND CAR BUILDERS ONLY.

Kimball's Pressed Wrought Iron Open Turnbuckles.

Without Stub Bolt Ends Tapped. U. S. Standard.

SIZE.	Price.	SIZE.	Price.
$\frac{7}{8}$ inch.....	.37	$1\frac{1}{2}$ inch.....	.70
1 inch.....	.40	$1\frac{5}{8}$ inch.....	.80
$1\frac{1}{8}$ inch.....	.45	$1\frac{3}{4}$ inch.....	.90
$1\frac{1}{4}$ inch.....	.50	$1\frac{7}{8}$ inch.....	1.10
$1\frac{3}{8}$ inch.....	.60	2 inch.....	1.35

With Right and Left Stub Bolt Ends.

SIZE.	Price.	SIZE.	Price.
$\frac{7}{8}$ inch.....	.50	$1\frac{1}{2}$ inch.....	1.00
1 inch.....	.55	$1\frac{5}{8}$ inch.....	1.15
$1\frac{1}{8}$ inch.....	.62	$1\frac{3}{4}$ inch.....	1.35
$1\frac{1}{4}$ inch.....	.70	$1\frac{7}{8}$ inch.....	1.65
$1\frac{3}{8}$ inch.....	.85	2 inch.....	2.00

For other sizes, special prices made on application, according to requirements. We make all sizes from $\frac{1}{4}$ inch. to 5 inch. of any desired length. Above all 6 inch. between heads.

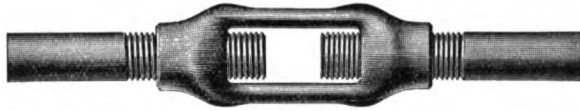
THE CHAPMAN JACK.

No. of Jack.....	4	6	8	10	12	14	16	20	24	30	36
Height over all closed down.....	4 in.	6 in.	8 in.	10 in.	12 in.	14 in.	16 in.	20 in.	24 in.	30 in.	36 in.
Safe rise with load.....	2 in.	3 in.	$3\frac{1}{2}$ in.	$4\frac{1}{2}$ in.	$6\frac{1}{2}$ in.	$7\frac{1}{2}$ in.	$9\frac{1}{2}$ in.	13 in.	17 in.	20 in.	26 in.
Height over all screwed up to limit.	6 in.	9 in.	$11\frac{1}{2}$ in.	$14\frac{1}{2}$ in.	$18\frac{1}{2}$ in.	$21\frac{1}{2}$ in.	$25\frac{1}{2}$ in.	33 in.	41 in.	50 in.	56 in.
Diameter of Screw.....	1 in.	$1\frac{1}{2}$ in.	$1\frac{3}{4}$ in.	$1\frac{7}{8}$ in.	$1\frac{7}{8}$ in.	$2\frac{1}{4}$ in.	$2\frac{1}{4}$ in.	$2\frac{1}{2}$ in.	$2\frac{1}{2}$ in.	$\left\{ \begin{array}{l} 2\frac{1}{2} \\ \text{st'l.} \end{array} \right.$	$\left\{ \begin{array}{l} 2\frac{1}{2} \\ \text{steel.} \end{array} \right.$
Price, each.....	1.50	2.25	3.00	3.75	4.50	6.00	7.50	10.50	13.50	18.00	24.00

Pressed Wrought Iron Open

TURNBUCKLES.

THE BEST.



THE BEST.

Adopted as Standard by a Majority of Railroads in the United States.

CLEVELAND CITY FORGE AND IRON CO., Cleveland, O.



THE CHAPMAN JACK

PATENTED.

Always Lubricated and Ready for Use.

Common Jacks are frequently destroyed in efforts to make them work quickly after the screws are set with rust and dirt. This consideration alone makes the CHAPMAN Jack the most economical one to purchase.



THE CHAPMAN JACK CO.

CLEVELAND, OHIO.

**The Butler
Attachment**

*Contains Many Merits. Constantly Growing in Favor
and Service. Strong, Durable, Economical.*

....GUARANTEED....

AN ABSOLUTE SPRING PROTECTOR.

Has Less Parts, Costs Less to Apply and Maintain than any other Attachments.

Over 300,000 Cars now Equipped in Every Kind of Service.

The Butler Drawbar Attachment Co.

CLEVELAND, OHIO.

Write for Drawings.

ROLL AND SHEET BRASS.

Brown & Sharpe's Gauge the Standard. Common High Brass.

WIDER THAN	NOT WIDER THAN	All Nos. not thinner than No. 20.	Thinner than No. 20. Not thinner than No. 24.	Thinner than No. 24. Not thinner than No. 26.	Thinner than No. 26. Not thinner than No. 28.
2 inches.....	12 inches.....	.22	.22	.23	.23
12 inches.....	14 inches.....	.23	.24	.24½	.25
14 inches.....	16 inches.....	.25	.26	.27	.28
16 inches.....	18 inches.....	.27	.28	.29	.30
18 inches.....	20 inches.....	.29	.30	.31	.32
20 inches.....	22 inches.....	.31	.32	.33	.34
22 inches.....	24 inches.....	.33	.34	.35	.36
24 inches.....	26 inches.....	.36	.37	.38	.39
26 inches.....	28 inches.....	.39	.40	.41	.42
28 inches.....	30 inches.....	.42	.43	.44	.45
30 inches.....	32 inches.....	.46	.47	.48	.49
32 inches.....	34 inches.....	.50	.51	.52	.53
34 inches.....	36 inches.....	.55	.56	.57	.58
36 inches.....	38 inches.....	.60	.61	.63	.65
38 inches.....	40 inches.....	.65	.68	.71	.75

The term High Brass refers to color, not to temper.

Half a cent per lb. additional on each number thinner than Nos. 28 to 38, inclusive.

For cutting any of the above to a particular length, 7 cents per lb. additional.

Brazing, Spinning and Spring Brass, 1 cent per lb. more than Common High Brass.

Low Brass, 4 cents per lb. more than Common High Brass.

Gilding, Oreide and Bronze, 7 cents per lb. more than Common High Brass.

SHEET AND BOLT COPPER.

SIZE OF SHEETS.

SIZE OF SHEETS.		Cents per lb. advance over base price.											
WIDTHS.	LENGTHS.	Cents per lb. advance over base price.											
		64 oz. and over, 50 lb. sheet, 30x60 and heavier.	32 oz. to 64 oz., 25 to 50 lb. sheet, 30x60.	24 oz. to 32 oz., 18¾ to 25 lb. sheet, 30x60.	16 oz. to 24 oz., 12½ to 18¾ lb. sheet, 30x60.	14 oz. and 15 oz., 11 to 12½ lb. sheet, 30x60.	12 oz. and 13 oz., 9½ to 11 lb. sheet, 30x60.	10 oz. and 11 oz., 7¾ to 9½ lb. sheet, 30x60.	8 oz. and 9 oz., 6¾ to 7¾ lb. sheet, 30x60.	Lighter than 8 oz.			
		Base	Base	Base	Base	1	2	3	6	9			
Not wider than 30 inches	Not longer than 72 inches.....	Base	Base	Base	Base	1	2	3	6	9			
	Longer than 72 inches.....	"	"	"	"	1	3	6	9				
	Not longer than 96 inches.....	"	"	"	"	2	6						
	Longer than 96 inches.....	"	"	"	"	2	4	7	10				
Wider than 30 inches, but not wider than 36 inches	Not longer than 72 inches.....	"	"	"	"	2	6	9					
	Longer than 72 inches.....	"	"	"	"	2	6	9					
	Not longer than 96 inches.....	"	"	"	"	2	6	9					
	Longer than 96 inches.....	"	"	"	1	3							
	Not longer than 120 inches.....	"	"	1	2								
Wider than 36 inches, but not wider than 48 inches	Longer than 120 inches.....	"	"	1	2	4	7	10					
	Not longer than 72 inches.....	"	"	1	2	4	7	10					
	Longer than 72 inches.....	"	"	1	3	5	8						
	Not longer than 96 inches.....	"	"	2	4	8							
	Longer than 96 inches.....	"	"	2	4	8							
Wider than 48 inches, but not wider than 60 inches	Not longer than 120 inches.....	"	1	3	6								
	Longer than 120 inches.....	"	1	3	6								
	Not longer than 72 inches.....	"	Base	1	3	6	11						
	Longer than 72 inches.....	"	"	2	4	9							
	Not longer than 96 inches.....	"	"	2	4	9							
Wider than 60 inches, but not wider than 72 inches	Longer than 96 inches.....	"	1	3	6								
	Not longer than 120 inches.....	"	1	3	6								
	Longer than 120 inches.....	1	2	4	8								
	Not longer than 96 inches.....	Base	1	3	8								
	Longer than 96 inches.....	"	2	5	10								
Wider than 72 inches, but not wider than 108 ins.	Not longer than 120 inches.....	1	3	8									
	Longer than 120 inches.....	1	3	8									
	Not longer than 96 inches.....	2	4	7									
	Longer than 96 inches.....	3	5	9									
Wider than 108 inches	Not longer than 132 inches.....	4	6										
	Longer than 132 inches.....	5	8										

SEAMLESS DRAWN BRASS AND COPPER TUBING.

Stubbs' Wire Gauge Standard—Outside Diameter.

O. G.	N. G.	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3
4 to 11....	3 to 9..						33	31	30	29	28	27	25	24	23	22	22	22	22	22
12.....	10.....				37	35	33	31	30	29	28	27	25	24	23	22	22	22	22	22
13.....	11.....				37	35	33	31	30	29	28	27	25	24	23	22	22	22	23	23
14.....	12.....			41	37	35	33	31	30	29	28	27	25	24	23	23	23	23	23	23
15.....	13.....			42	38	36	33	32	31	30	29	28	26	25	24	24	24	24	24	24
16.....	14.....			43	39	37	34	33	32	31	30	29	26	25	25	25	25	25	25	25
17.....	15.....			44	40	38	35	34	33	32	31	30	27	26	26	26	26	26	26	26
18.....	16.....	81	61	46	42	39	36	35	34	32	31	30	28	27	27	27	27	27	28	28
19.....	17.....	86	62	47	43	40	37	36	35	34	33	32	30	29	28	28	28	28	29	30
20.....	18 to 19..	91	64	49	44	41	39	38	37	36	35	34	32	31	30	30	30	30	31	32
21.....	20.....	96	66	51	46	43	41	40	39	38	37	36	35	34	32	32	32	32	33	34
22.....	21.....	101	71	56	48	44	42	41	40	39	38	37	37	36	34	34	35	36	36	37
23.....	22.....	106	76	61	50	46	44	43	42	41	40	39	39	39	37	37	38	39	39	40
24.....	23.....	116	81	66	53	48	46	45	44	43	41	40	40	41	41	41	42	42	...	...
25.....	24.....	131	86	71	56	51	49	47	46	45	44	43	44	45						

O. G.	N. G.	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{3}{4}$	5	$5\frac{1}{4}$	$5\frac{1}{2}$	$5\frac{3}{4}$	6	$6\frac{1}{4}$	$6\frac{1}{2}$	$6\frac{3}{4}$	7	$7\frac{1}{4}$	$7\frac{1}{2}$	$7\frac{3}{4}$
4 to 11....	3 to 9..	22	22	22	23	23	24	25	26	27	28	28	28	28	28	28	28	28	28	28
12.....	10.....	22	22	22	24	24	25	26	27	28	29	29	29	29	29	29	29	29	29	29
13.....	11.....	23	23	24	25	25	26	27	28	29	30	30	30	30	30	30	30	30	30	30
14.....	12.....	23	24	25	26	26	27	28	29	30	31	31	31	31	31	31	31	31	31	31
15.....	13.....	24	25	26	27	27	28	29	30	31	32	32	32	32	32	32	32	32	32	32
16.....	14.....	25	26	27	28	29	30	31	32	33	34	34	34	34	34	34	34	34	34	34
17.....	15.....	27	28	29	30	31	32	33	34	35	36	36	36	36	36	36	36	36	36	36
18.....	16.....	29	30	31	32	33	34	35	36	37	38	38	38	38	38	38	38	38	38	38
19.....	17.....	31	32	33	34	35	36	37	38	39	40	40	40	40	40	40	40	40	40	40
20.....	18 to 19..	33	34	35	36	37	38	39	40	41	42	42	42	42	42	42	42	42	42	42
21.....	20.....	35	36	37	38	39	40	41	42											
22.....	21.....	38	39	40	41	42	43													
23.....	22.....	41	42	43	44															
24.....	23.....																			
25.....	24.....																			

Copper, Bronze or Gilding Tubes, 3 cents per pound additional.

NOTE—For diameters of the fractional parts of an inch, where no price is given, take the column to the left of where such size would appear if designated. Thus: $1\frac{1}{8}$ would go at price of $1\frac{1}{4}$ inches.

SEAMLESS DRAWN BRASS AND COPPER TUBES.

IRON PIPE SIZES.

Actual Out- side Diameter. Inches.	Actual Inside Diameter. Inches.	Same as Iron Size.	Weight per foot.		Length. Feet. about.	Price per pound.	
			Brass.	Copper.		Brass.	Copper.
.405.....	.250.....	$\frac{1}{8}$	.296	.310	16	.36	.39
.540.....	.343.....	$\frac{1}{4}$	.451	.476	16	.32	.35
.675.....	.468.....	$\frac{3}{8}$	.600	.657	15	.29	.32
.840.....	.625.....	$\frac{1}{2}$	.780	.838	10	.27	.30
1.050.....	.843.....	$\frac{3}{4}$	1.180	1.259	10	.21	.24
1.315.....	1.062.....	1	1.750	1.855	10	.21	.24
1.660.....	1.343.....	$1\frac{1}{4}$	2.535	2.681	10	.21	.24
1.900.....	1.593.....	$1\frac{1}{2}$	3.045	3.166	10	.21	.24
2.375.....	2.062.....	2	4.000	4.369	10	.21	.24
2.875.....	2.437.....	$2\frac{1}{2}$	6.323	6.868	8	.21	.24

Made to correspond with iron tubes and to fit iron tube fittings.

BRASS FITTINGS.

IRON PIPE SIZE.

Size.....Inches	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Elbows.....each	.10	.12	.16	.25	.35	.50	.85	1.15	1.50
Tees.....each	.12	.15	.20	.30	.45	.70	1.00	1.25	1.75
Crosses.....each	.15	.20	.30	.40	.55	.80	1.15	1.40	1.95
Plugs.....each	.08	.08	.10	.15	.20	.25	.40	.50	.90
Caps.....each	.08	.10	.15	.20	.30	.40	.60	.75	1.25
Lock Nuts.....each	.08	.08	.10	.15	.20	.25	.40	.50	.90
Reducers.....each			.14	.20	.30	.35	.50	.65	1.25
Bushings, to reduce 1 size.....each		.07	.09	.13	.21	.38	.50	.67	.84
Bushings, to reduce 2 or more sizes.....each			.09	.13	.21	.38	.50	.67	.84
Couplings.....each	.08	.10	.15	.20	.30	.40	.60	.75	1.25
Return bends, open patent.....each				.50	.80	1.00	1.50	2.25	3.00
Unions, Ground Joints, finished.....each	.35	.40	.55	.75	1.00	1.40	1.90	2.75	4.00
Nipples, 4 inch and under.....each	.15	.20	.30	.35	.45	.60	.90	1.25	1.60

BRASS AND COPPER WIRE.

BROWN & SHARPE GAUGE.	Com. High Brass.	Low Brass.	Spring Brass.	Copper	BROWN & SHARPE GAUGE.	Com. High Brass.	Low Brass.	Spring Brass.	Copper
Nos. 0 to 10.....	.23	.27	.25	.28	No. 27.....	.38	.42	.40	.46
Nos. 10 to 16.....	.23½	.27½	.25½	.28½	No. 28.....	.42	.46	.44	.51
Nos. 17 and 18.....	.24	.28	.26	.32	No. 29.....	.45	.49	.47	.54
Nos. 19 and 20.....	.25	.29	.27	.33	No. 30.....	.48	.52	.50	.62
No. 21.....	.26	.30	.28	.34	No. 31.....	.51	.55	.53	.67
No. 22.....	.27	.31	.29	.35	No. 32.....	.55	.59	.57	.73
No. 23.....	.28	.32	.30	.36	No. 33.....	.59	.63	.61	.82
No. 24.....	.30	.34	.32	.38	No. 34.....	.64	.68	.66	.95
No. 25.....	.32	.36	.34	.40	No. 35.....	.70	.74	.72	1.30
No. 26.....	.35	.39	.37	.43	No. 36.....	.76	.80	.78	1.50

Flat, Square and Half Round Wire, 4 cents advance on Round Wire.
Fancy Wire, not less than 10 cents advance on Round Wire.

BRASS ESCUTCHEON PINS.

IN 1 LB. PAPER BOXES.

Inch.	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
Wire G.													
10.....			.75	.73	.72	.71	.70	.69	.68	.67	.66	.65	.63
11.....			.76	.74	.73	.72	.71	.70	.69	.68	.67	.66	.66
12.....			.77	.75	.74	.73	.72	.71	.70	.69	.68	.67	.67
13.....			.78	.76	.75	.74	.73	.72	.71	.70	.69	.69	.69
14.....	.90	.83	.80	.77	.76	.75	.74	.73	.72	.71	.70	.70	.70
15.....	.95	.85	.82	.78	.77	.76	.75	.74	.73	.72	.72	.72	.72
16.....	1.00	.90	.85	.82	.80	.78	.76	.75	.74	.74	.74	.74	.75
17.....	1.10	1.00	.92	.89	.87	.85	.83	.81	.80	.80	.80	.81	.82
18.....	1.20	1.10	1.00	.96	.94	.92	.90	.90	.90	.92	.92	.93	.95
19.....	1.35	1.20	1.15	1.10	1.05	1.00	1.00	1.03	1.03	1.08	1.05		
20.....	1.55	1.35	1.25	1.20	1.15	1.10	1.10	1.15	1.15	1.15			
21.....	1.75	1.55	1.45	1.35	1.30	1.30	1.35	1.35					
22.....	2.00	1.75	1.60	1.45	1.40	1.45							

Silver Plated, 20 cents per lb. advance on above prices.

Revised Price List—TACKS, NAILS, BRADS, &c.—January 15, 1899.

FULL WEIGHT.	Oz.	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.	2.45	2.65	2.85	3.05	3.25	3.45	3.80	4.40	5.60	6.80	8.00	9.20	10.40	11.60	12.80	14.00	15.40	16.80	
Tinned Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.	3.10	3.30	3.50	3.85	4.20	4.55	4.90	5.50	6.70	8.00	9.30	10.65	12.00	13.60	15.20	16.80	18.65	20.50	
Gimp and Lace Tacks, per doz. papers.	1.12	1.12	1.12	1.30	1.40	1.60	1.80	2.00	2.52	3.36	4.20	5.04	5.88	6.72	7.56	8.40	9.24	10.08	
Tinned Gimp and Lace Tacks, per doz. papers.																			
Copper Tacks, per doz. papers.																			

HALF WEIGHT.	Oz.	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.																			
Tinned Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.																			
Gimp and Lace Tacks, per doz. papers.																			
Tinned Gimp and Lace Tacks, per doz. papers.																			
American Cut Tacks (including Carpet), per doz. papers.																			
Tinned American Cut Tacks (including Carpet), per doz. papers.																			
Hungarian Nails, American Iron, per doz. papers.																			

Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.	1.55	1.65	1.75	1.85	2.00	2.30	2.90	3.50	4.10	4.70	5.30	5.90	6.50	7.10	7.80	8.50			
Tinned Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per doz. papers.	2.40	2.45	2.50	2.55	2.60	2.80	3.10	3.80	4.70	5.60	6.50	7.40	8.30	9.20	10.10	11.10	12.10		
Gimp and Lace Tacks, per doz. papers.	1.85	2.05	2.20	2.40	2.55	2.85	3.45	4.10	4.75	5.45	6.10	6.80	7.70	8.50	9.45	10.35			
Tinned Gimp and Lace Tacks, per doz. papers.	2.75	2.85	3.00	3.10	3.35	3.65	4.35	5.05	6.10	7.15	8.20	9.30	10.50	11.70	12.90	14.10			
American Cut Tacks (including Carpet), per doz. papers.	.95	1.05	1.15	1.25	1.35	1.50	1.80	2.20	2.60	3.00	3.40	3.80	4.20	4.60	5.00	5.40			
Tinned American Cut Tacks (including Carpet), per doz. papers.	1.70	1.75	1.80	1.85	1.90	2.10	2.50	3.00	3.65	4.30	4.95	5.60	6.25	6.90	7.55	8.20			
Hungarian Nails, American Iron, per doz. papers.					.59	.75	.92	1.10	1.25	1.50	1.70	1.85	2.00	2.20					

QUARTER WEIGHT.	Oz.	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
American Cut Tacks (including Carpet), per doz. papers.				.60	.65	.70	.75	.80	.85	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80
Tinned American Cut Tacks (including Carpet), per doz. papers.				.90	.95	1.00	1.05	1.10	1.15	1.35	1.60	1.90	2.25	2.60	2.90	3.25	3.55	3.90	4.20

H. C. ROBERTS ELECTRIC SUPPLY CO.

831 Arch Street, PHILADELPHIA, PA.

*Electric Railway, Lighting, Telegraph and
.....Telephone Supplies.....*

LINE MATERIAL AND LINEMENS TOOLS.

H. B. CHESS, President.

WALTER CHESS, Vice-President.

O. H. BATEMAN, Sec. and Treas.

ESTABLISHED 1842.

The Anchor Nail and Tack Works, Incorporated,

MANUFACTURERS OF

TACKS, SMALL CUT NAILS, SHOE NAILS, GLAZIER POINTS, Etc., Etc.

**South 19th Street and Monongahela River,
PITTSBURGH, PA.**

W. S. FORBES & CO.

**Pork Packers and
Curers of Fancy Meats.**

RAILROAD ORDERS A SPECIALTY.

RICHMOND, VIRGINIA.

Revised Price List—TACKS, NAILS, BRADS, &c.—January 15, 1899—Continued.

IN BULK AND IN POUND PAPERS.	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	22	24
Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per lb.	4.15	3.70	3.20	2.40	1.85	1.60	1.45	1.30	1.15	1.00	.95	.90	.85	.80	.80	.80	.80	.80
Tinned Swedes Iron Tacks (All kinds except Gimp, Lace, Brush, Looking Gl.), per lb.			5.85	4.00	2.95	2.40	2.00	1.85	1.55	1.40	1.35	1.30	1.25	1.20	1.20	1.20	1.20	1.20
Gimp and Lace Tacks, per lb.			4.00	3.20	2.55	2.20	1.95	1.60	1.40	1.20	1.15	1.10	1.05	1.00	1.00	1.00	1.00	1.00
Tinned Gimp and Lace Tacks, per lb.			6.70	4.80	3.60	3.00	2.45	2.15	1.80	1.60	1.55	1.50	1.45	1.40	1.40	1.40	1.40	1.40
Copper and Brass Tacks, per lb.	3.00	2.00	1.50	1.10	.90	.80	.70	.60	.56	.56	.56	.56	.56	.56	.56	.56	.56	.56
Copper and Brass Gimp Tacks, per lb.			2.00	1.50	1.20	1.10	.90	.80	.76	.70	.64	.62	.60					
Leathered Carpet Tacks, per lb.								.84	.67	.59	.55	.50						
GOODS SOLD BY LENGTH. Inch Prices per Lb. Paper or Doz.	1	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	7	1	1 1/2	1 1/2	1 1/2	1 1/2	2	2 1/2	2 1/2
Finishing, Trunk and Clout Nails, in lb. or bulk, per lb.			.58	.48	.39	.34	.32	.29	.27	.24	.23	.23	.23	.23	.23	.23	.23	.23
Tinned Trunk and Clout Nails, in lb. or bulk, per lb.			.70	.60	.50	.45	.43	.40	.38	.35	.34	.34	.34	.34	.34	.34	.34	.34
Basket, Cigar Box and Chair Nails, in lb. or bulk, per lb.			.66	.56	.46	.40	.38	.35	.33	.30	.28	.26						
Basket, Cigar Box & Chair Nails, Tinned, in lb. or bulk, per lb.			.81	.71	.61	.53	.49	.46	.43	.41	.39	.37						
Copper and Brass Finishing and Cigar Box Nails, per lb.			.78		.68		.64	.64	.62	.60	.58	.58	.58					
Copper and Brass Trunk and Clout Nails, lb. or bulk, per lb.			.60		.56		.56	.56	.56	.56	.56	.56	.56					
Common and Patent Brads, half wt., per doz. papers.	.70		.84		.91		1.00		1.15	1.25	1.40	1.60	1.75	2.00	3.15	3.40		
Common and Patent Brads, in lb. or bulk, per lb.	1.75	1.40	1.20		.81		.67		.50	.42	.37	.35	.34	.31	.28	.25		
Brush Tacks and Nails, in lb. or bulk, per lb.					1.30	1.05	.90	.80	.70	.60	.50	.45						
Brush Tacks, full wt., per doz. papers.					3.90	4.00	4.10	4.15	4.20	4.30	4.40	4.70						
Looking Glass Tacks, in lb. or bulk, per lb.	1.20		1.05		.62		.55		.49	.43	.37							
Looking Glass Tacks, full wt., per doz. papers.					1.20		1.25		1.50	1.70	2.30							
Picture Frame Points, in lb. or bulk, per lb.		.53			.45		.39		.34	.31	.28							

NET EXTRAS.—Bulk in 5 pound wooden boxes, 3/4c. per pound net; bulk in 10 pound wooden boxes, 1/2c. per pound net; bulk in 25 pound wooden boxes, 1/4c. per pound net.

For 1/2 lb. papers where prices are not given, add 4c. per pound to list. For 1/4 lb. papers where prices are not given, add 8c. per pound to list. American Cut and American Carpet have same bulk list as Swedes Cut and Carpet.

STAPLE TOOLS.

Solid Box Vises.

No. 25—3 $\frac{3}{8}$ in. Jaw.....	Each	12.00	No. 105—6 in. Jaw.....	Each	23.00
No. 30—3 $\frac{1}{2}$ in. Jaw.....	Each	11.00	No. 110—6 $\frac{1}{4}$ in. Jaw.....	Each	24.00
No. 35—4 in. Jaw.....	Each	10.00	No. 115—6 $\frac{1}{2}$ in. Jaw.....	Each	25.00
No. 40—4 in. Jaw.....	Each	10.50	No. 120—6 $\frac{3}{8}$ in. Jaw.....	Each	26.00
No. 45—4 $\frac{1}{4}$ in. Jaw.....	Each	11.00	No. 125—6 $\frac{1}{2}$ in. Jaw.....	Each	27.50
No. 50—4 $\frac{1}{2}$ in. Jaw.....	Each	11.50	No. 130—6 $\frac{3}{4}$ in. Jaw.....	Each	29.00
No. 55—4 $\frac{3}{4}$ in. Jaw.....	Each	12.00	No. 135—6 $\frac{3}{4}$ in. Jaw.....	Each	31.50
No. 60—4 $\frac{1}{2}$ in. Jaw.....	Each	13.00	No. 140—7 in. Jaw.....	Each	33.00
No. 65—5 in. Jaw.....	Each	14.00	No. 145—7 in. Jaw.....	Each	35.00
No. 70—5 in. Jaw.....	Each	15.00	No. 150—7 in. Jaw.....	Each	36.00
No. 75—5 $\frac{1}{4}$ in. Jaw.....	Each	16.00	No. 160—7 $\frac{1}{4}$ in. Jaw.....	Each	41.50
No. 80—5 $\frac{1}{2}$ in. Jaw.....	Each	17.50	No. 170—7 $\frac{1}{4}$ in. Jaw.....	Each	44.50
No. 85—5 $\frac{3}{4}$ in. Jaw.....	Each	18.50	No. 180—8 in. Jaw.....	Each	47.00
No. 90—5 $\frac{3}{4}$ in. Jaw.....	Each	20.00	No. 190—8 in. Jaw.....	Each	53.00
No. 95—5 $\frac{3}{4}$ in. Jaw.....	Each	21.00	No. 200—8 in. Jaw.....	Each	56.00
No. 100—6 in. Jaw.....	Each	22.00			

Boxes and Screws.

No. 1—Diameter of screw 1 $\frac{1}{8}$ inch, for Vises from No. 30 to No. 50.....	Each	3.50
No. 2—Diameter of screw 1 $\frac{1}{4}$ inch, for Vises from No. 55 to No. 70.....	Each	4.00
No. 3—Diameter of screw 1 $\frac{1}{2}$ inch, for Vises from No. 75 to No. 85.....	Each	4.50
No. 4—Diameter of screw 1 $\frac{3}{4}$ inch, for Vises from No. 90 to No. 125.....	Each	6.50
No. 6—Diameter of screw 1 $\frac{3}{4}$ inch, for Vises from No. 130 to No. 195.....	Each	9.50
No. 7—Diameter of screw 2 inch, for Vises from No. 200 to No. 250.....	Each	11.00

Mattocks.

Adze Eye, Long Cutter, 6 lbs.....	Per dozen	17.00
Adze Eye, Short Cutter, 5 $\frac{1}{2}$ lbs.....	Per dozen	16.50
Adze Eye, Long Cutter, 5 lbs. or lighter.....	Per dozen	16.00
Adze Eye, Short Cutter, 5 lbs. or lighter.....	Per dozen	16.00
Adze Eye, Pick Mattocks, 6 lbs.....	Per dozen	17.00
Adze Eye, Pick Mattocks, 5 lbs.....	Per dozen	16.00

Cooper Froes.

No. 10— 8 inches.....	Per dozen	13.00	No. 10—14 inches.....	Per dozen	14.50
No. 10—10 inches.....	Per dozen	13.50	No. 10—16 inches.....	Per dozen	15.00
No. 10—12 inches.....	Per dozen	14.00			

Grub Hoes.

Western Pattern—No. 0, 3 lbs..	Per dozen	11.50	Baltimore Pattern—No. 1, 3 $\frac{1}{2}$ lbs..	Per dozen	12.00
Western Pattern—No. 1, 3 $\frac{1}{2}$ lbs..	Per dozen	12.00	Baltimore Pattern—No. 2, 4 $\frac{1}{2}$ lbs..	Per dozen	13.00
Western Pattern—No. 2, 4 lbs..	Per dozen	12.50	Baltimore Pattern—No. 3, 5 lbs..	Per dozen	14.00
Western Pattern—No. 3, 4 $\frac{1}{2}$ lbs..	Per dozen	13.00	Baltimore Pattern—No. 4, 5 $\frac{3}{4}$ lbs..	Per dozen	15.00

Hazel Hoes.

Hazel Hoes.....	Per dozen	14.00
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STAPLE TOOLS—Continued.

Picks.

RAILROAD OR CLAY PICKS.							
Adze Eye, 4 to 5 pounds.....						Per dozen	11.50
Adze Eye, 5 to 6 pounds.....						Per dozen	12.50
Adze Eye, 6 to 7 pounds.....						Per dozen	13.50
Adze Eye, 7 to 8 pounds.....						Per dozen	14.50
Adze Eye, 8 to 9 pounds.....						Per dozen	16.50
Adze Eye, 9 to 10 pounds.....						Per dozen	18.50
Straight Weights.....	4 lb.	5 lb.	6 lb.	7 lb.	8 lb.	9 lb.	10 lb.
	11.50	12.00	13.00	14.00	15.50	17.50	19.50

ORE PICKS.

Regular point and chisel ends, or double pointed when ordered. Extra quantity and quality of steel when ordered.

No. 54—Adze Eye, 5 to 6 pounds.....	Per dozen	12.00
No. 54—Adze Eye, 6 to 7 pounds.....	Per dozen	13.00
No. 54—Adze Eye, 7 to 8 pounds.....	Per dozen	14.00

ADZE EYE CONTRACTORS' PICKS.

No. 55—Adze Eye, 7 pounds.....	Per dozen	18.00
No. 55—Adze Eye, 7½ pounds.....	Per dozen	18.50
No. 55—Adze Eye, 8 pounds.....	Per dozen	19.00
No. 55—Adze Eye, 8½ pounds.....	Per dozen	20.00
No. 55—Adze Eye, 9 pounds.....	Per dozen	21.00
No. 55—Adze Eye, 9½ pounds.....	Per dozen	22.00
No. 55—Adze Eye, 10 pounds.....	Per dozen	23.00

STEEL LAKE SUPERIOR MINING PICK.

No. 56.....	Special Price and Quality.
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TAMPING PICKS.

Adze Eye, 6 to 7 pounds.....				Per dozen	18.00
Adze Eye, 7 to 8 pounds.....				Per dozen	19.00
Adze Eye, 8 to 9 pounds.....				Per dozen	20.00
Straight Weights.....	{	6 lb.	7 lb.	8 lb.	9 lb.
		18.00	18.50	19.50	21.00

STONE PICKS.

No. 18—6 to 7 pounds.....	Per dozen	16.50
No. 18—7 to 8 pounds.....	Per dozen	17.50
No. 18—8 to 9 pounds.....	Per dozen	18.50

COAL PICKS.

No. 16—Weight, 2 pounds.....	Per dozen	8.50	No. 16—Weight, 5 pounds.....	Per dozen	11.50
No. 16—Weight, 2½ pounds.....	Per dozen	9.00	No. 16—Weight, 5½ pounds.....	Per dozen	12.00
No. 16—Weight, 3 pounds.....	Per dozen	9.50	No. 16—Weight, 6 pounds.....	Per dozen	12.50
No. 16—Weight, 3½ pounds.....	Per dozen	10.00	No. 16—Weight, 6½ pounds.....	Per dozen	13.00
No. 16—Weight, 4 pounds.....	Per dozen	10.50	No. 16—Weight, 7 pounds.....	Per dozen	14.00
No. 16—Weight, 4½ pounds.....	Per dozen	11.00			

ADZE EYE COAL PICKS.

No. 15.....	Same List as No. 16
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ANTHRACITE COAL PICKS.

No. 17.....	Same List as No. 16
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ALTON PATTERN COAL PICKS.

No. 53—Long Ear pattern.....	50c. per dozen additional on List of No. 16
Special Coal Picks of any desired pattern made to order from templet or drawing.	

IRON CITY TOOL WORKS, Limited, PITTSBURGH, PA.

✧ Makers of Standard R. R. Track Tools ✧

... TRACK TOOLS.



Shovels and Scoops.

EUREKA NUT LOCK CO., Pittsburgh, Penna.

Strongest Spring Lock ever made. Sample Nut Locks furnished on application.



Only
Award for
Anti-
Frictional
Metals,
Chicago,
1893, and
National
Export
Exposition,
Phila.,
1899.

AJAX METAL

Car Engine and Machinery Bearings.
Every Bearing Guaranteed.

INGOTS AND CASTINGS

We make only Standard Metals.
Honestly Made. Honest Prices.

CORRESPONDENCE SOLICITED.

THE AJAX METAL CO., Philadelphia.

MANUFACTURED BY IRON CITY TOOL WORKS, LIMITED, PITTSBURGH, PA., U. S. A.

Picks—Continued.

MILL PICKS.

No. 22—Mill Picks, cast steel, 2 to 3 pounds..... Per dozen 22.00

ADZE EYE MINERS' PICKS.

<p>No. 19—Surface, No. 1, 4 lbs. Per dozen 14.00</p> <p>No. 19—Surface, No. 2, 4½ lbs. Per dozen 15.00</p> <p>No. 19—Surface, No. 3, 5 lbs. Per dozen 16.00</p> <p>No. 19—Surface, No. 4, 5½ lbs. Per dozen 17.00</p> <p>No. 19—Surface, No. 5, 6 lbs. Per dozen 18.00</p> <p>No. 19—Surface, No. 6, 6½ lbs. Per dozen 19.00</p> <p>No. 19—Surface, No. 7, 7 lbs. Per dozen 20.00</p> <p>No. 20—Drifting, No. 1, 3 lbs. Per dozen 12.50</p> <p>No. 20—Drifting, No. 2, 4 lbs. Per dozen 14.00</p>	<p>No. 20—Drifting, No. 3, 4½ lbs. Per dozen 15.00</p> <p>No. 20—Drifting, No. 4, 5 lbs. Per dozen 16.00</p> <p>No. 20—Drifting, No. 5, 6 lbs. Per dozen 17.50</p> <p>No. 21—Poll, No. 1, 3½ lbs. Per dozen 15.00</p> <p>No. 21—Poll, No. 2, 4 lbs. Per dozen 16.00</p> <p>No. 21—Poll, No. 3, 4½ lbs. Per dozen 17.00</p> <p>No. 21—Poll, No. 4, 5 lbs. Per dozen 18.50</p> <p>No. 21—Poll, No. 5, 6 lbs. Per dozen 20.00</p> <p>No. 21—Poll, No. 6, 6¾ lbs. Per dozen 21.50</p>
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Solid Cast Steel Sledges.

KIND.	5 Lbs. and Over.	8 to 5 Lbs.	Under 8 Lbs.
No. 34—Smiths' Sledges.....	.30	.36	.45
No. 35—Stone Sledges.....	.30	.36	.45
No. 36—Striking Sledges.....	.30	.36	.45
No. 37—Coal Sledges.....	.30	.36	.45

Solid Cast Steel Hammers.

KIND.	5 Lbs. and Over.	8 to 5 Lbs.	Under 8 Lbs.
No. 43—Hand Drilling Hammers.....	.36	.40	.45
No. 45—Napping Hammers.....	.30	.36	.45
No. 39—Mason Hammers.....	.40	.45	.50
No. 42—Smiths' Hand Hammers.....	.30	.36	.45
No. 44—Drilling or Striking Hammers.....	.30	.36	.45
No. 40—Single Face Spalling Hammers.....	.36	.40	.45
No. 41—Double Face Spalling Hammers.....			

Solid Cast Steel Mauls, Steel Wedges, Etc.

No. 51—Steel Wedges, coal.....	Per pound	.20
No. 52—Steel Wedges, stone.....	Per pound	.20
No. 68—Steel Wedges, wood.....	Per pound	.20
No. 50—Steel Wedges, wood truckee, first quality.....	Per pound	.25
No. 50—Steel Wedges, wood truckee, second quality.....	Per pound	.20
No. 49—Ship or Top Maul, all sizes.....	Per pound	.42
No. 46—Wood Choppers' Maul, straight cut.....	Per pound	.36
No. 38—Stone or Granite Axe, all sizes.....	Per pound	.50
No. 67—Octagon Pattern, Turning Sledge.....	Per pound.	.40

Steel-Faced, instead of Solid Cast Steel Hammers and Sledges made in any desired pattern to order.

Standard Railroad Track Tools.

No. 47—Steel Spike Maul.....	Per lb.	.30	No. 61—Steel Rail Fork.....	Per lb.	.20
No. 48—Steel Track Chisel.....	Per lb.	.25	No. 62—Steel Rail Tongs.....	Per lb.	.20
No. 57—Steel Sledge, double faced.....	Per lb.	.30	No. 63—Steel Crow Bar, wedge point.....	Per lb.	.08
No. 58—Steel Track Punch, round point.....	Per lb.	.25	No. 64—Steel Crow Bar, pinch point.....	Per lb.	.08
No. 59—Steel Track Punch, square p'nt.....	Per lb.	.25	No. 65—Steel Tamping Bar.....	Per lb.	.10
No. 60—Steel Track Wrench.....	Per lb.	.14	No. 66—Steel Claw Bar.....	Per lb.	.12

T HINGES.

Light T Hinges.

INCHES	3	4	5	6	8	10	12	14
Per dozen pairs.....	1.15	1.25	1.55	1.85	2.35	3.45	4.70	6.10
Weight per dozen pairs, pounds	2 $\frac{1}{4}$	3 $\frac{3}{8}$	4 $\frac{1}{2}$	6	9 $\frac{1}{2}$	13	21 $\frac{1}{2}$	31 $\frac{1}{2}$

Heavy T Hinges.

INCHES	4	5	6	8	10	12	14
Per dozen pairs ..	1.95	2.25	2.70	3.40	5.00	7.00	9.60
Weight per dozen pairs, pounds	4 $\frac{1}{2}$	7	8 $\frac{1}{4}$	12	18 $\frac{3}{4}$	30 $\frac{1}{4}$	41 $\frac{3}{4}$

Extra Heavy T Hinges.

INCHES	4	5	6	8	10	12	14	16
Per dozen pairs	2.80	3.85						
Per pound .....			.24	.23	.21	.21	.21	.21
Weight per dozen pairs, pounds		14	21	33	55	78	90	108

HINGE HASPS.

INCHES.....	3	4 $\frac{1}{2}$	6	8	10	12
Per single dozen.....	.85	1.05	1.35	1.80	2.60	3.55

STRAP HINGES.

Heavy.

INCHES	4	5	6	8	10	12	14	16
Per dozen pairs.....	1.70	2.30						
Per pound.....			.23	.21	.20	.20	.20	.20
Weight per dozen pairs, pounds.....	6 $\frac{1}{2}$	10	18 $\frac{1}{2}$	31 $\frac{1}{2}$	51 $\frac{1}{2}$	78	85	103

Light.

INCHES.....	3	4	5	6	7	8	10	12	44
Per dozen pairs.....	1.35	1.80	2.20	2.85	3.45	4.00	5.50	8.00	10.50
Weight per dozen pairs, pounds.....	3	3 $\frac{1}{2}$	6 $\frac{1}{4}$	8 $\frac{3}{4}$	12	15	21	35 $\frac{1}{4}$	46

LOOSE JOINT CAST BUTTS.

INCHES	2x2	2x2½	2½x2	2½x2½	2½x3	3x2½	3x3	3x3½
Per dozen	1.00	1.10	1.20	1.35	1.50	1.60	1.75	1.95
INCHES	3½x3	3½x3½	3½x4	4x3½	4x4	4x4½	4½x4½	5x5
Per dozen	2.15	2.35	2.50	2.70	2.90	3.20	4.00	5.50

LOOSE PIN WROUGHT BUTTS.

Reversible for Right or Left Hand.

INCHES	2x2	2x2½	2x3	2½x2	2½x2½	2½x3	3x2½	3x3
Per dozen	1.40	1.50	1.70	1.60	1.80	2.20	2.40	2.60
INCHES	3x3½	3½x3	3½x3½	3½x4	4x3½	4x4	4½x4½	5x5
Per dozen	3.00	3.60	3.80	4.30	4.60	4.70	5.90	7.70

NARROW FAST JOINT BUTTS.

INCHES	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4
Per dozen pairs . . . . .	.40	.50	.65	.80	.90	1.05	1.10	1.30	1.45	2.00	2.85

WROUGHT BRASS BUTTS.

INCHES	½	¾	1	1¼	1½	1¾	2	2¼	2½	3
Narrow, per dozen pairs . . . . .	.38	.38	.48	.60	.78	.96	1.28	1.73	1.92	2.80
Middle, per dozen pairs . . . . .			.54	.67	.87	1.10	1.44	1.80	2.84	3.70
Broad, per dozen pairs . . . . .			.60	.80	1.00	1.30	1.70	2.20	2.60	4.27

Desk, or Inside Blind Hinges.

INCHES	1	1½	1¾	1¾	1½
Per dozen pairs . . . . .	.87	1.08	1.27	1.50	1.80

M. V. I. POLISHED STEEL SHAFTING.

ROUNDS.

DIAMETER.	Weight Per Ft.	Price Per Lb.	DIAMETER.	Weight Per Ft.	Price Per Lb.	DIAMETER.	Weight Per Ft.	Price Per Lb.
$\frac{3}{8}$	.095	10	$1\frac{5}{8}$	7.04	5	3	24.08	5
$\frac{1}{4}$	.167	10	$1\frac{1}{2}$	7.60	5	$3\frac{1}{8}$	24.58	$5\frac{1}{4}$
$\frac{5}{16}$	.259	$8\frac{1}{2}$	$1\frac{3}{4}$	8.16	5	$3\frac{3}{8}$	26.09	$5\frac{1}{4}$
$\frac{3}{8}$	.370	7	$1\frac{7}{8}$	8.78	5	$3\frac{1}{2}$	27.16	$5\frac{1}{4}$
$\frac{7}{16}$	.510	7	$1\frac{1}{8}$	9.39	5	$3\frac{3}{4}$	28.24	$5\frac{1}{4}$
$\frac{1}{2}$	.666	7	$1\frac{1}{4}$	10.00	5	$3\frac{7}{8}$	29.40	$5\frac{1}{4}$
$\frac{9}{16}$	.843	6	2	10.65	5	$3\frac{1}{4}$	30.43	$5\frac{1}{4}$
$\frac{5}{8}$	1.05	6	$2\frac{1}{8}$	11.15	5	$3\frac{1}{2}$	31.50	$5\frac{1}{4}$
$\frac{11}{16}$	1.25	6	$2\frac{1}{4}$	12.07	5	$3\frac{3}{4}$	32.64	$5\frac{1}{4}$
$\frac{3}{4}$	1.50	$5\frac{1}{2}$	$2\frac{3}{8}$	12.79	5	$3\frac{1}{2}$	33.84	$5\frac{1}{4}$
$\frac{13}{16}$	1.757	$5\frac{1}{2}$	$2\frac{1}{2}$	13.49	5	$3\frac{5}{8}$	35.20	$5\frac{1}{4}$
$\frac{7}{8}$	2.03	$5\frac{1}{2}$	$2\frac{3}{4}$	14.00	5	$3\frac{1}{2}$	36.40	$5\frac{1}{4}$
$1\frac{1}{8}$	2.34	$5\frac{1}{2}$	$2\frac{7}{8}$	15.07	5	$3\frac{3}{4}$	37.45	$5\frac{1}{4}$
1	2.64	$5\frac{1}{2}$	$2\frac{1}{2}$	15.83	5	$3\frac{7}{8}$	39.85	$5\frac{1}{4}$
$1\frac{1}{4}$	3.00	$5\frac{1}{2}$	$2\frac{1}{2}$	16.68	5	$3\frac{1}{2}$	41.04	$5\frac{1}{4}$
$1\frac{3}{8}$	3.33	$5\frac{1}{2}$	$2\frac{1}{2}$	17.55	5	4	42.50	6
$1\frac{1}{2}$	3.74	$5\frac{1}{2}$	$2\frac{3}{8}$	18.32	5	$4\frac{1}{4}$	48.28	6
$1\frac{5}{8}$	4.16	$5\frac{1}{2}$	$2\frac{1}{2}$	19.31	5	$4\frac{1}{2}$	52.62	6
$1\frac{3}{4}$	4.61	$5\frac{1}{2}$	$2\frac{3}{4}$	20.18	5	$4\frac{3}{4}$	54.11	$6\frac{1}{2}$
$1\frac{7}{8}$	5.048	$5\frac{1}{2}$	$2\frac{1}{2}$	21.15	5	$4\frac{1}{2}$	60.88	$6\frac{1}{2}$
$1\frac{1}{2}$	5.50	$5\frac{1}{2}$	$2\frac{1}{2}$	22.09	5	$4\frac{1}{2}$	65.50	$6\frac{1}{2}$
$1\frac{1}{2}$	6.00	5	$2\frac{1}{2}$	22.96	5	5	67.50	7
$1\frac{1}{2}$	6.52	5						

Prices quoted are for shafts 2 to 24 feet, inclusive.

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